Australian Government
Australian Institute of Health and Welfare

Towards a performance measurement framework for equity in higher education

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Authoritative information and statistics to promote better health and wellbeing

Towards a performance measurement framework for equity in higher education

Australian Institute of Health and Welfare
Canberra
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Abbreviations

ABS	Australian Bureau of Statistics
ABSTUDY	Aboriginal and Torres Strait Islander Study Assistance Scheme
ACER	Australian Council for Educational Research
ACT	Australian Capital Territory
AEDI	Australian Early Development Index
AEP	National Aboriginal and Torres Strait Islander Education Policy
AGS	Australian Graduate Survey
AGS-GDS	Australian Graduate Survey - Graduate Destination Survey
AHS	Australian Health Survey
AIFS	Australian Institute of Family Studies
AIHW	Australian Institute of Health and Welfare
AQF	Australian Qualifications Framework
AQHE	Advancing Quality in Higher Education
ASGC	Australian Standard Geographical Classification
ATAR	Australian Tertiary Admissions Rank
AUSSE	Australasian Survey of Student Engagement
AVETMISS	Australian Vocational Education and Training Management Information Statistical Standard
CD	Census Collection District
CEQ	Course Experience Questionnaire
COAG	Council of Australian Governments
CSP	Commonwealth supported place
DEEWR	Department of Education, Employment and Workplace Relations
DEST	Department of Education, Science and Training
DIICCSRTE	Department of Industry, Innovation, Climate Change, Science, Research and Tertiary Education
DIISRTE	Department of Industry, Innovation, Science, Research and Tertiary Education
EFTSL	Equivalent Full Time Student Load
ENTER	Equivalent National Tertiary Entrance Rank

FaHCSIA	Department of Families, Housing, Community Services and Indigenous Affairs
Go8	Group of 8 universities
GPS	Graduate Pathways Survey
GSS	General Social Survey
HDR	higher degree by research
HEDSP	Higher Education Disability Support Program
HEPPP	Higher Education Participation and Partnerships Program
HPF	Health Performance Framework
IEO	Index of Education and Occupation
IPPIC	Institutional Performance Portfolios Information Collection
ISP	Indigenous Support Program
LSAY	Longitudinal Surveys of Australian Youth
MCEECDYA	Ministerial Council for Education, Early Childhood Development and Youth Affairs
MCEETYA	Ministerial Council on Education, Employment, Training and Youth Affairs
MFE	Measurement framework for equity in higher education
NATSIHPF	National Aboriginal and Torres Strait Islander Health Performance Framework
NATSISS	National Aboriginal and Torres Strait Islander Social Survey
NESB	non-English speaking background
NHS	National Health Survey
NSAC	National Schools Attendance Collection
NSW	New South Wales
NT	Northern Territory
OECD	Organisation for Economic Co-operation and Development
PIRLS	Progress in International Reading Literacy Study
PISA	Programme for International Student Assessment
Qld	Queensland
RA	Remoteness Area (ABS)
SA	South Australia
SCRGSP	Steering Committee for the Review of Government Service Provision

SEIFA	Socio-Economic Indexes for Areas
SES	socioeconomic status
SET	Survey of Education and Training
SEUV	Survey of Employer Use and Views of the VET system
SEW	Survey of Education and Work
SOS	Student Outcomes Survey
STAT	Special Tertiary Admissions Test
TAC	Tertiary Admissions Centre
Tas	Tasmania
UES	University Experience Survey
UMAT	Undergraduate Medicine and Health Sciences Admission Test
VET	vocational education and training
Vic	Victoria
WA	Western Australia
WAP	working age population
WHO	World Health Organization

Symbols

–	nil or rounded to zero
. .	not applicable
n.a.	not available
n.p.	not publishable because of small numbers, confidentiality or other concerns about the quality of the data

Summary

Increasing participation in higher education for under-represented groups has been a goal of both the Australian Government and Australian universities. In particular, the government has invested in a wide range of programs to support the efforts of universities to increase the enrolment and completion rates of:

- Aboriginal and Torres Strait Islander students
- those from low socioeconomic areas
- people who live in regional and remote areas
- students with disabilities.

To support these efforts, the Australian Institute of Health and Welfare (AIHW) was asked to begin developing a potential set of indicators for a performance measurement framework for equity in higher education (MFE), which could then allow progress to be measured and gaps to be identified.

This report provides details about the potential set of indicators and the process used to develop them. The potential indicators:

- reflect the 4 key phases in the life cycle of students (pre-entry; offers, acceptances, and enrolment; experience during university; post-graduate outcomes)
- align with the key elements of the policies and programs to improve equity
- include a mixture of inputs, outputs and outcomes
- capture the determinants of higher education attainment, as well as the outcomes
- match with existing reporting and measurement frameworks
- use existing data sources where possible.

The project identified 61 potential indicators for further discussion amongst key stakeholders. The potential indicators were organised into a 3-tier framework that matched the structure of the National Aboriginal and Torres Strait Islander Health Performance Framework (NATSIHPF). The 3 tiers are:

- Tier 1: Educational attainment and outcomes
- Tier 2: Precursors of higher education attainment
- Tier 3: Education system performance.

Tier 1 encompasses attainment and outcome measures that form the key targets and goals for the equity programs and policies. Tier 2 includes predictors of educational attainment (including developmental outcomes, aspirations, and educational performance), which previous research has shown vary by equity group. Tier 3 indicators are process measures of the efforts and strategies that universities and the government are undertaking to try to create change in the Tier 1 outcomes. The Tier 3 indicators are essential for monitoring both the aim and reach of these strategies.

As shown in Figure 1, this project identified 23 potential indicators for educational attainment and outcomes (Tier 1), 9 potential indicators for precursors of higher education attainment (Tier 2), and 29 potential indicators for education system performance (Tier 3).

TIER 1

Educational attainment and outcomes (measured at university, jurisdiction, population levels)

Pre-entry	Offers, acceptances, enrolments	University experience	Graduate outcomes
1.01 Year 12 applications	1.04 Offers	1.12 Students who pass	*Employment – any job:*
1.02 Applications	1.05 Offers by process	1.13 Re-enrolments within a year	1.18 within 4 months
1.03 Application pathways	1.06 Rejected offers	1.14 Completed courses in a given year	1.20 within 3 years
	1.07 Deferments	1.15 Completed courses within 5 years	*Employment – in a job related to course:*
	1.08 Offers and enrolments	1.16 Satisfaction with quality of teaching	1.19 within 4 months
	1.09 Enrolments	1.17 Satisfaction with student support	1.21 within 3 years
	1.10 Meeting low SES targets		*Further study after completion:*
	1.11 Meeting other equity group targets		1.22 within 4 months
			1.23 within 3 years

TIER 2

Precursors of higher educational attainment

Pre-entry

2.01 Influence of university representatives

2.02 Intention to apply for university

2.03 Parental intent for students to apply for university

2.04 Expectation to complete university

2.05 Vulnerability across developmental domains

2.06 Literacy and numeracy

2.07 School attendance

2.08 Year 12 completions

2.09 ATAR scores

TIER 3

Education system performance

Pre-entry	Offers, acceptances and enrolments	University experience	Post graduate outcomes
3.01 Funding by program type	3.03 Funding by program type	3.06 Funding by program type	3.08 Funding by program type
3.02 Equity-focussed interventions by funding source and equity group	3.04 Equity-focussed interventions by funding source and equity group	3.07 Equity-focussed interventions by funding source and equity group	3.09 Equity-focussed interventions by funding source and equity group
3.10 Number of partnership activities	3.05 University target for low SES and other selected equity groups	3.16 Number of support and participation activities	3.26 Activities by type of program and target group
3.11 Number of participants in activities	3.14 Policies and practices	3.17 Number of students using services	3.27 Number of participants in programs/activities
3.12 Information session attendance	3.15 Scholarships	3.18 Scholarships by source	3.28 Use of university career services
3.13 Alternate pathway types		3.19 Number of equity scholarships awarded	3.29 Attendance at careers fairs or information sessions
		3.20 Austudy	
		3.21 ABSTUDY	
		3.22 Youth allowance	
		3.23 Part-time enrolments	
		3.24 External/multi-modal study	

Notes:

Where possible indicators to be measured by Indigenous status, socioeconomic disadvantage, regional/remoteness, disability, non-English speaking background, year at university, and calendar year. The numbering system for potential indicators within each tier is as follows: input indicators are numbered first, followed by output indicators, then outcome indicators. See Table 4.16 for full descriptions and data sources for each indicator.

Figure 1: Potential measurement framework for equity in higher education

1 Introduction

Statistics show that Indigenous Australians, those from low socioeconomic status (low SES) areas, people who live in regional and remote areas, and those with disabilities are under-represented in higher education (Commonwealth of Australia 2009). The Australian Government has invested in equity programs that support universities to widen access and participation for these groups.

At present, however, there is no framework for measuring progress towards, and achievement of, equity outcomes for these groups. The development of a performance measurement framework for equity in higher education (MFE) is part of a broader process to develop a comprehensive approach to equity programs. Regular measurement of progress, combined with evidence on the most effective equity interventions, is critical to bringing about changes in equity outcomes.

In 2013, the then Department of Industry, Innovation, Science, Research and Tertiary Education (DIISRTE) commissioned the Australian Institute of Health and Welfare (AIHW) to begin progressing work on a potential MFE, focusing on domestic undergraduates. The AIHW was tasked with developing a set of conceptually based indicators organised into a 3-tiered model based on the structure of the National Aboriginal and Torres Strait Islander Health Performance Framework (NATSIHPF). This potential MFE would then form the basis for further discussion and development with key stakeholders.

The proposed tiers for the MFE include:

- Tier 1—Educational attainment and outcomes
- Tier 2—Precursors of higher education attainment
- Tier 3 – Education system performance.

This report presents the results of this developmental work. It is structured as follows:

- The rest of this chapter includes a discussion of the importance of higher education, then provides an overview of the Australian higher education system and how it is structured. Data on current disparities in higher education follows.
- Chapter 2 presents a conceptual framework and discussion of the key factors related to access and participation in higher education and how those may account for inequities in higher education outcomes.
- Chapter 3 summarises the key policy initiatives designed to improve equity in higher education.
- Chapter 4 focuses on the development of the potential indicators which could be included in an MFE. It discusses critical issues related to definitions and measurement of the equity groups themselves, reviews previous equity frameworks and the indicators they used (or suggested), examines potential data sources, and details 4 key phases in the life cycle of students. The chapter describes the process used to bring together all of the above information to create 61 potential indicators covering the 3 tiers: 23 potential indicators for educational attainment and outcomes (Tier 1), 9 potential indicators for precursors of higher education attainment (Tier 2), and 29 potential indicators for education system performance (Tier 3).

Box 1. Changes in departmental names and responsibilities

During the course of this project, there were several changes to the names and structures of the departments responsible for the higher education sector and for higher education statistics:

- This project was commissioned by the Department of Industry, Innovation, Science, Research and Tertiary Education (DIISRTE), which then became the Department of Industry, Innovation, Climate Change, Science, Research and Tertiary Education (DIICCSRTE).
- When the project began, DEEWR (Department of Education, Employment and Workplace Relations) was responsible for the collection of national data on university students, staff, and applications and offers data.
- Following a change of government and departmental restructures in 2013, tertiary education and national higher education data collection responsibilities now sit in the Department of Education.

These name/responsibility changes are handled as follows in the report:

- Publications, statistics, and policies are cited by the name of the department responsible for them at the time.
- The generic terms 'the department' or 'Education' are used when referring to initiatives or definitions that may have begun under one department but continue on under the current Department of Education.

The role of higher education

Higher education has benefits at both an individual and national level. Research suggests that higher education boosts an individual's employment prospects, earnings, status and personal development. For example, people with higher-level qualifications are less likely to be unemployed (AIHW 2011). The unemployment rate in May 2010 for people aged 25–54 with a bachelor's degree or graduate qualification was 3.2%, compared with 7.2% for people whose highest educational attainment was Year 11 or below. Higher education has the potential to broaden employment choices, increase the chances of promotion, and is also linked with higher median incomes (ABS 2010a).

The benefits of education are more than financial, however, with higher educational attainment also related to overall health and well-being. Education promotes skills and knowledge that can help an individual understand information and seek services to improve their health, while financial benefits may include access to better housing and well-resourced communities. Higher education has also been linked to increased social capital, social networks, and community participation. Health, in turn, has been linked back to educational and employment opportunities (AIHW 2011).

Higher education also benefits nations socially and economically by facilitating cohesion and economic integration (James et al. 2008). Higher education provides the foundation for a highly productive and professional labour force, which contributes to a country's stock of skills and capabilities and makes the population more competitive internationally. Higher education is also instrumental in ensuring that a nation's research and innovation capability are sufficiently robust and progressive to maintain a level of competitive advantage within the international marketplace.

In March 2008, a *Review of Australian higher education* (the Review) was commissioned by the Australian Government and conducted by an independent panel led by Professor Denise Bradley AC. The Review examined the future direction of the higher education sector, its fitness for meeting the needs of the Australian community and the options for reform. The outcome of the Review predicted a shortfall in the number of tertiary-qualified Australians able to meet workforce demands in the medium to long-term future which could become a serious economic issue for Australia. The review recommended that due to this shortfall, the government should seek to capitalise on the abilities of all Australians to gain a higher education qualification.

In addition to the focus on overall levels of higher education attainment, the Review also highlighted that despite Australia's mass higher education system, significant inequities persisted in terms of participation rates and educational outcomes for disadvantaged social groups, which required greater government intervention. Similar trends have been identified globally, and equity in higher education has become an important issue for governments of comparable developed nations (Bradley et al. 2008; James et al. 2008).

The higher education system in Australia

Before turning to current levels of inequity, however, it is important to understand how Australia's system of higher education is structured and how it operates.

Australia has 41 universities, 37 of which are known as 'Table A' providers because they are listed in Table A of the *Higher Education Support Act 2003*. Table A providers are entitled to receive public funding, but they cannot strictly be termed public universities as they also receive revenue from non-government sources and are self-governing and self-accrediting (Norton 2012). As Table A providers receive the majority of government funding, they are the focus of this report.

Alongside their membership of the main association, Universities Australia, some of Australia's universities also belong to sub-groups that offer collaboration, marketing and lobbying power. These groups are:

- **Group of Eight (Go8)**, who consider themselves Australia's leading universities, based on their research outputs, graduate outcomes, academic reputation of staff and industry links
- **Australian Technology Network of Universities**, whose 5 members work closely with industry
- **Innovative Research Universities**, which is a group of 7 research-intensive universities
- **Regional Universities Network**, which is a network of 6 universities focusing on the unique requirements and contributions of regional universities.

See Appendix A (Table A1.1) for a list of all Australian universities, their affiliations and locations.

Most Australian university campuses are located in metropolitan areas, with the largest campuses found in capital cities. About 40% of campuses are located in regional areas. The geographic location of campuses in a country as large as Australia influences the number of students from regional and remote areas who can attend on-site and succeed at university, particularly those from low SES backgrounds (Stevenson et al. 2001; Griffith University 2008;

Richardson & Friedman 2010). Individual universities may also have several campuses, providing wider geographic coverage.

The delivery modes and attendance options available at each university may also influence enrolment and completion rates among disadvantaged students. The most common mode of higher education delivery is internal (or on-campus). However, in 2012, some regional universities had more than half of their students studying via external mode (or distance education), including Charles Darwin University, Charles Sturt University, the University of New England and the University of Southern Queensland (DIICCSRTE 2013a). Charles Darwin University, Charles Sturt University and the University of New England also had over half of their students enrolled part time in 2012 (DIICCSRTE 2013a). Spending less time on campus may influence the type and amount of support services available for students once they are enrolled (Richardson & Friedman 2010), but may also provide the necessary flexibility for students to be able to manage university studies and other key elements of their lives.

Pathways into university

As shown in Figure 1.1, there are two main pathways into university for domestic students: application through centralised state tertiary admission centres (TACs) or directly to a university.

Over 80% of domestic applications to university are made through TACs. Of these, the majority (55%) are from Year 12 applicants (DIICCSRTE 2013a). Applicants to TAC list between 6 and 12 courses in order of preference, allowing them to apply for multiple courses at multiple higher education providers at the same time. Applications are made prior to the end of the school year, but secondary school students have the chance to alter their course preferences once they receive their results.

Applicants may also apply directly to a university for entry. Those who apply directly include mature age applicants without formal qualifications, students from certain equity groups, and students switching from other courses or universities.

Student selection

Universities select the students to whom they will make offers. For most courses, selection is based on a Year 12 applicant's Australian Tertiary Admissions Rank (ATAR). Following successful completion of secondary school, domestic students in all states except Queensland receive an ATAR. The ATAR ranks students among their age cohort and is based on an aggregate score of their Year 12 subject scores. Students are ranked from 0 to 99.95, in increments of 0.05. If a student has an ATAR of 70.00, it means that their Year 12 performance was better than 70% of their age cohort. Queensland's system also ranks students based on their achievement in Year 12 subjects but gives them an Overall Position rank instead, which ranges from 1 (highest) to 25 (lowest).

For non-Year 12 applicants, their past performance in secondary, post-secondary or tertiary studies is considered, along with other factors, such as work experience.

Additionally, for some courses, an interview, portfolio of work, test or questionnaire may also be used to select students either solely or in combination with their academic performance. Applicants are considered for courses in preference order, so that if there are no places available in their first preference course, they are considered for their second

preference and so on, until an offer is made, or there are no more preferences. Once students are selected for a course, they may defer entry for one year.

The ATAR that is necessary for a student to receive an offer in a particular course changes each year depending on the competition for selection. The nomenclature varies between states, but the cut-off or 'clearly-in' ATAR is the rank at or above which eligible students are offered a place in the course. (For a student to be eligible for selection, they must have completed any prerequisites for the course, which may include achieving a particular score in 1 or more subjects.) A course's cut-off ATAR for a particular year depends on the number of places available in the course, the number of applicants listing the course as a preference that year and the academic achievement of those applicants.

A proportion of students are accepted into courses with an ATAR that is below the cut-off. Universities have alternative admission pathways to give special consideration to students whose ATAR does not guarantee them an automatic offer. Special consideration is given to students who have performed well in prerequisite subjects or other studies, and students who have experienced disadvantage during their studies. 'Bonus points' may be added to a student's ATAR if they meet one or more of these criteria.

The use of ATAR for student selection has been criticised for not being a good predictor of academic performance at university, and for basing student selection on academic performance alone (Norton 2012; Palmer et al. 2011). Despite these limitations, ATAR has been found to be predictive of overall course completion (Marks 2007a).

Standardised admissions tests are generally not used in Australia, except for some courses and in some student groups. For example, some health professional courses require students to sit the Undergraduate Medicine and Health Sciences Admission Test (UMAT) to be eligible for selection. Applicants who are non-school leavers and do not have other formal academic qualifications to base selection on can sit the Specialised Tertiary Admissions Test (STAT). Some universities also use STAT in the admission process for certain courses.

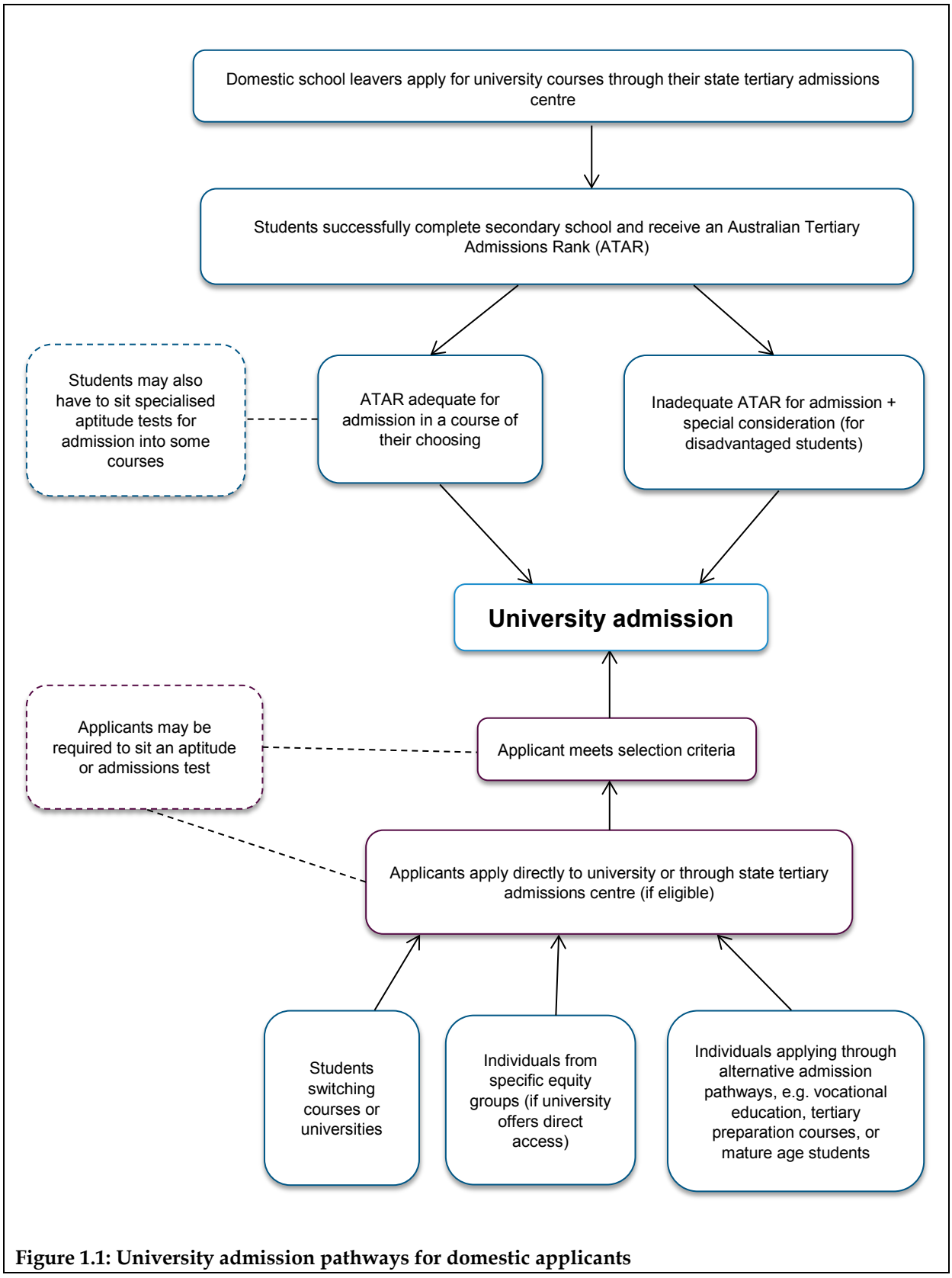
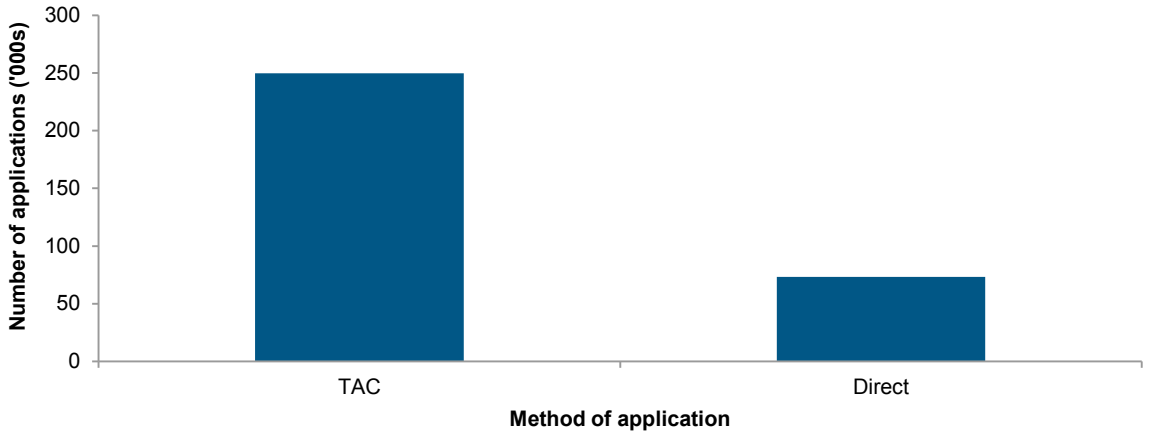


Figure 1.1: University admission pathways for domestic applicants

Figure 1.2 shows the distribution of 2012 applications by the method of application (DIISRTE 2012a). While 77% of university applicants (249,814) applied through their state tertiary admissions centre (TAC), the remainder (73,191) applied directly to their university of choice. Around 54% of TAC applicants were Year 12 students, compared with 6% of direct applicants. Of the non-Year 12 applications, 38% were from applicants who had previously attempted higher education without obtaining a qualification.

Direct applicants were more likely to be older than TAC applicants, and their most common prior educational attainment was secondary school (28%) followed by incomplete higher education (23.6%).



Source: DIISRTE 2012a.

Figure 1.2: University applications by method of application, 2012

Applications from Indigenous Australians made up a higher proportion of direct applications (2.7%) than TAC applications (1.2). A higher proportion of direct applications were also made by women than men (62.8% compared with 37.2%).

University participation

In 2012, approximately 1.26 million students were enrolled in Australian universities, compared with 30,000 in 1950 (DETYA 2001; DIICCRSTE 2013a). The majority (73%) of those students were domestic enrolments.

Most domestic students are accepted in a Commonwealth Supported Place (CSP), where the government subsidises a substantial part of their education costs. Students must contribute the remaining amount, which can be paid via a student loan. How much the government subsidises students varies depending on the subjects they take. For example, in 2012, government subsidies ranged from 16% for law, accounting, administration, economics and commerce subjects to 81% for science subjects (Norton 2012). The Australian Government also offers eligible students financial assistance for education and living costs through the Youth Allowance, Austudy and ABSTUDY schemes. Eligibility and payment rates are based on either a personal or parental income test depending on the student's personal circumstances.

Since 2010, the government has supported an expansion of domestic enrolments, and from 2012 a demand-driven system was put in place where universities are funded for as many

domestic undergraduate places as they can fill. This was to support the government's objective of having 40% of 25–34 year olds with at least a bachelor-level qualification by 2025. In 2012 this figure stood at 36.8% (DIICCSRTE 2013a).

From 2000 to 2012, the percentage of domestic students passing the units that they attempted hovered around 85% (DIICCSRTE 2013a). During this period, student satisfaction with teaching quality steadily rose, with more than 50% of students indicating their satisfaction since 2007. In 2012, the *My University* website was established to give students information on each university's facilities; services; graduate outcomes and student satisfaction; and completion rates by subject area. See <http://myuniversity.gov.au/>.

Current disparities

Participation in higher education is low among certain groups in Australia. The following groups have been recognised by governments and universities as being under-represented in Australian universities relative to their representation in the Australian population (DEET 1990; Bradley et al. 2008):

- Aboriginal and Torres Strait Islander Australians
- people from low SES backgrounds
- people from non-English speaking backgrounds (NESB)
- people from regional and remote areas
- people with disability
- women in non-traditional subject areas.

Active government policies exist for improving equity in higher education for four of these groups: Aboriginal and Torres Strait Islander students, students from low SES backgrounds, students from regional and remote areas and students with disability.

The existing disparities in the higher education sector are outlined below for each equity group. The disparities are discussed in terms of the commonly used measures of access, participation, success, retention and completion rates. See Box 1 for definitions of these terms (DIISRTE 2012b). Population reference values for each group are based on the general population aged 15–64.

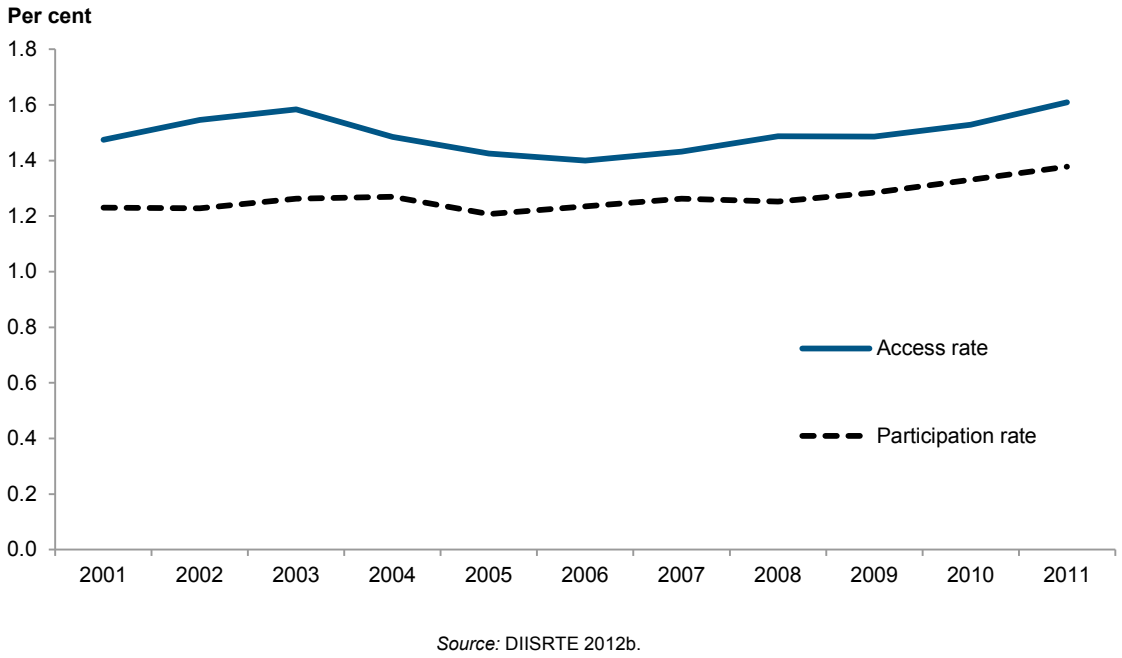
Box 2: Definitions of commonly used equity performance indicators

Access rate	Number of students in an equity group commencing university as a percentage of all commencing domestic students
Participation rate	Number of students in an equity group enrolled as a percentage of all domestic students enrolled
Retention rate	Number of students in an equity group who re-enrol in a given year as a percentage of domestic students who were enrolled in the previous year (less the number who completed their course)
Success rate	Equivalent Full-time Student Load (EFTSL) of units passed as a percentage of all EFTSL of units attempted
Completion rate	Number of students in an equity group that complete a course in a given year as a percentage of completions among all domestic students.

Aboriginal and Torres Strait Islander Australians

Indigenous students are those who self-identify as Aboriginal and/or Torres Strait Islander on their university enrolment forms. In 2011, 1.6% of commencing, and 1.3% of all domestic undergraduate students identified as Indigenous (DIISRTE 2012b). This is lower than the 2.6% of Australians aged 15–64 who identified as Indigenous in the 2011 ABS Census of Population and Housing (ABS 2012a). However, as not all Indigenous students may identify as such on university enrolment forms, their access and participation rates may be underestimated.

Figure 1.3 presents data from 2001 to 2011 on the percentage of domestic undergraduate students who identify as Indigenous.



Source: DIISRTE 2012b.

Figure 1.3: Percentage of domestic undergraduate students identifying as Indigenous, by year, 2001–2011

There has been little variation since 2001 in the percentage of domestic undergraduate students who identify as Indigenous. In 2001, 1.5% of *commencing* domestic undergraduate students identified as Indigenous. That percentage fell to 1.4% between 2005 and 2007, rose to 1.5% between 2008 and 2010, and rose to 1.6% in 2011. Similar patterns are seen for the percentage of *all* domestic undergraduate students who identify as Indigenous, which ranged between 1.2% and 1.4% between 2001 and 2011.

The percentages in Figure 1.3 present the national picture. However, these numbers mask variation at the individual university level. The percentage of Indigenous students at particular universities may vary for a number of reasons, including the location of the university relative to residential locations of Indigenous students, the programs it offers, its entry requirements and alternative pathways, and Indigenous student outreach, connection with communities, and support offered at university.

Data from individual universities show that there is considerable variation across both universities and jurisdictions. Table 1.1 shows the minimum and maximum percentage of Indigenous students at the universities within each state/territory.

Table 1.1: Access and participation rates of domestic undergraduates who identified as Indigenous in 2011, by university and jurisdiction

State/Territory	Range of access rates (university level) Minimum–Maximum	Range of participation rates (university level) Minimum–Maximum	2011 Population reference point[a]
NSW	0.65–3.33	0.71–2.70	2.23
Vic	0.29–2.14	0.24–1.98	0.63
Qld	1.02–4.27	0.84–4.05	3.16
WA	1.02–3.06	0.95–1.78	2.78
SA	1.14–1.61	0.91–1.61	1.76
Tas	1.56	1.59	3.65
ACT	1.22–1.53	1.11–1.42	1.33
NT	6.07	4.84	23.65
Multi-state campuses	2.18	2.36	n.a.
Total	**1.61**	**1.38**	**2.55**[b]

(a) DIISRTE Equity Reference Values, 2011. Values are the percentage of Indigenous people in the general population (aged 15– 64) based on the 2006 Census, with some adjustments by the ABS to reflect population changes.

(b) Percentage of Australian population aged 15–64 that identified as Indigenous in the 2011 Census.

Source: DIISRTE 2012b; ABS 2012a.

Universities in Victoria had the lowest percentage of Indigenous students, ranging from 0.29% to 2.14% of all commencing students, which is not surprising given that Victoria has the lowest percentage of residents who identify as Indigenous (0.63%).

The barriers faced by Indigenous students when accessing higher education include cultural issues, lower levels of educational attainment at school, less financial resources to attend university, and lower educational aspirations (AIHW 2011; IHEAC 2010; Bradley et al. 2008; James et al. 2008; Behrendt et al. 2012). A manifestation of this is school retention rates, which are low among the Indigenous population. In 2010, less than half (47%) Indigenous students remained enrolled from Year 7 to Year 12 compared with 78% of non-Indigenous students (AIHW 2012). School completions are also significantly low among Indigenous students. In 2008, around 30% of Indigenous people aged 25–34 years had completed Year 12, compared with 73% of non-Indigenous people (AIHW 2011). The gap between Indigenous and non-Indigenous completions increases the further remote Indigenous students live (Helme & Lamb 2011).

Young Indigenous people are increasingly aspiring to go to university, to take up professional positions and in turn drive positive outcomes for their communities and the wider Australian community (Behrendt et al. 2012), however access rates to university for Indigenous students fall well below the level expected to achieve equitable representation. Equally important are the relatively low success and retention rates once they are enrolled (Bradley et al. 2008). For example in 2011, 87.7% of all domestic undergraduate students in Australia passed the units that they attempted compared with 71.7% of Indigenous students (DIISRTE 2012b). In addition, the retention rate (that is, the percentage of students

re-enrolling) for all domestic undergraduates in 2010 was 78.8%, compared with 65.5% for Indigenous students.

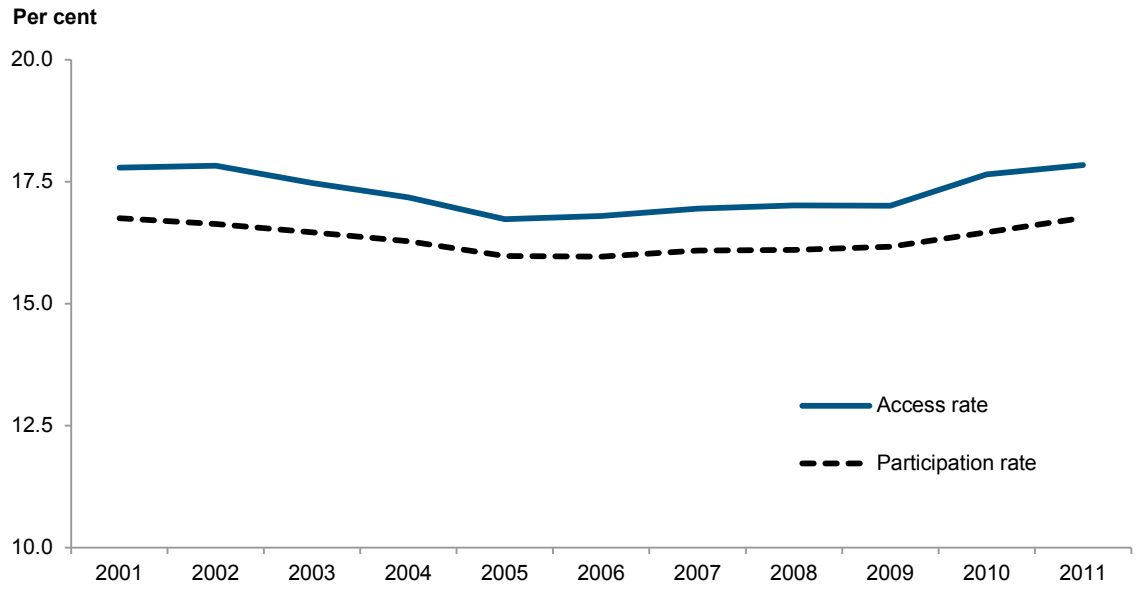
There was a similar discrepancy in completion rates in 2011, when Indigenous students comprised only 0.8% of completions among domestic undergraduate students (DIISRTE 2012b). In an analysis of completion rates among students who commenced their first university course between 1998 and 2001, Marks (2007a) found that by 2004, 31% of Indigenous students had completed compared with 66% of non-Indigenous students.

Pechenkina and Anderson (2011) contend that despite some exceptions, universities fall into two categories with respect to Indigenous students: those with high enrolments and low completions, and those with low enrolments and high completions. For example, the Group of Eight (Go8) universities have relatively low access rates for Indigenous students, but relatively high completion rates. This contrasts with regional universities who generally have high access rates but low completions. The difference in completion rates may reflect the selectivity of Go8 universities in choosing students who are more likely to complete. However this discrepancy may also indicate that Indigenous students are more likely to struggle at university due to financial or cultural reasons, or because they are less adequately prepared for university study than the wider student population (Pechenkina & Anderson 2011).

People from low SES backgrounds

It is important to note that while the standard terminology has been to refer to students from low SES backgrounds, in fact the socioeconomic status of students has been traditionally assigned by the SES of their postcode of permanent home residence. Postcodes in which residents are found to have low educational and occupational levels in Census data are classified as low SES. More specifically, a low SES postal area is one which falls in the bottom quartile of the 2006 Index of Education and Occupation (IEO) from the ABS Socio-Economic Indexes for Areas (SEIFA) (ABS 2008a).

Figure 1.4 shows that participation of those from low SES postcodes has hovered between 17 and 18% for commencing students and between 16% and 17% of all university students between 2001 and 2011.



Source: DIISRTE 2012b.

Figure 1.4: Percentage of domestic undergraduate students from low SES postcodes, by year, 2001– 2011

Tables 1.2 and 1.3 show that there is significant variation by university and jurisdiction in the percentage of students who are from areas with low SES. Table 1.2 is based on postcode, while Table 1.3 is based on the smaller census collection district levels (CD).

Table 1.2: Access and participation rates of domestic undergraduates who were residing in a low SES area in 2011 (based on postcode), by university and jurisdiction

	Range of access rates (university level)	Range of participation rates (university level)	Population reference point[(a)]
State/Territory	**Minimum–Maximum**	**Minimum–Maximum**	
NSW	7.67–30.04	7.00–27.80	23.50
Vic	10.18–23.97	8.47–22.18	19.90
Qld	14.79–45.64	13.92–45.96	30.50
WA	6.92–17.92	6.24–17.48	19.80
SA	17.84–27.87	15.55–26.15	35.70
Tas	33.70	32.85	54.10
ACT	4.53–7.27	4.35–6.98	0.00
NT	18.74	18.10	26.40
Multi-state campuses	13.63	13.00	n.a.
Total	**17.85**	**16.76**	**25.00**

(a) Percentage of 2008 population living in a postcode classified as low SES in the 2006 SEIFA Index of Education and Occupation.

Sources: DIISRTE 2012b; Phillimore & Koshy 2010

Table 1.3: Access and participation rates of domestic undergraduates who were residing in a low SES area in 2011 (based on collection district), by university and jurisdiction

State/Territory	Range of access rates (university level) Minimum–Maximum	Range of participation rates (university level) Minimum–Maximum	Population reference point[(a)]
NSW	7.11–26.44	7.01–26.85	24.20
Vic	8.97–23.77	7.73–23.52	22.20
Qld	11.60–37.05	10.71–36.23	28.80
WA	6.43–16.34	5.35–16.60	23.20
SA	15.52–25.55	14.13–23.73	33.10
Tas	27.13	26.16	45.40
ACT	4.62–7.73	3.80–6.95	0.25
NT	19.50	19.35	20.00
Multi-state campuses	13.69	13.05	n.a.
Total	**16.56**	**15.57**	**25.00**

(a) Percentage of 2009 population living in a Census Collection District classified as low SES in the 2006 SEIFA Index of Education and Occupation.

Sources: DIISRTE 2012b; DEEWR 2010a.

These data illustrate two key points:

- There is a wide variation in the percentage of students at each university who come from areas with low SES, ranging from a low of 4.62% at one university in the Australian Capital Territory to a high of 37% at one Queensland university (using CD level data). Thus, there are universities which are already achieving levels of low SES student participation above the population reference point.
- Geographic level matters—that is, once CDs are used instead of postcodes, the percentage of students from low SES areas decreases.

Students from low SES backgrounds are most under-represented in the Go8 universities in terms of access and participation rates (DIISRTE 2012b). James (2002) suggests that low access rates may be due to the low aspiration rates of students from low SES backgrounds to attend Go8 universities, the selectivity of Go8 universities, and the locality of Go8 universities in capital cities. Students from low SES backgrounds are also under-represented in professional faculties such as law, medicine and architecture, as well as in postgraduate study (James et al. 2008).

Low university participation rates among these students may also be due to their lower rates of secondary school completion and greater likelihood of progressing to work or vocational education rather than university after leaving school (James et al. 2008). For example, in 2006, 59% of students from low SES backgrounds completed Year 12, compared with 64% from medium SES backgrounds and 78% from high SES backgrounds (James et al. 2008). James (2002) also found that year 10 students from low SES backgrounds (measured using parents' education levels) were less likely to perceive education and university positively.

Although there is inequity in enrolments, students from low SES backgrounds (with the exception of those from regional and remote areas) perform just as well, or nearly as well, as students from higher SES groups in terms of retention, success and completion (James et al. 2008; Pechenkina & Anderson 2011; DIISRTE 2012b).

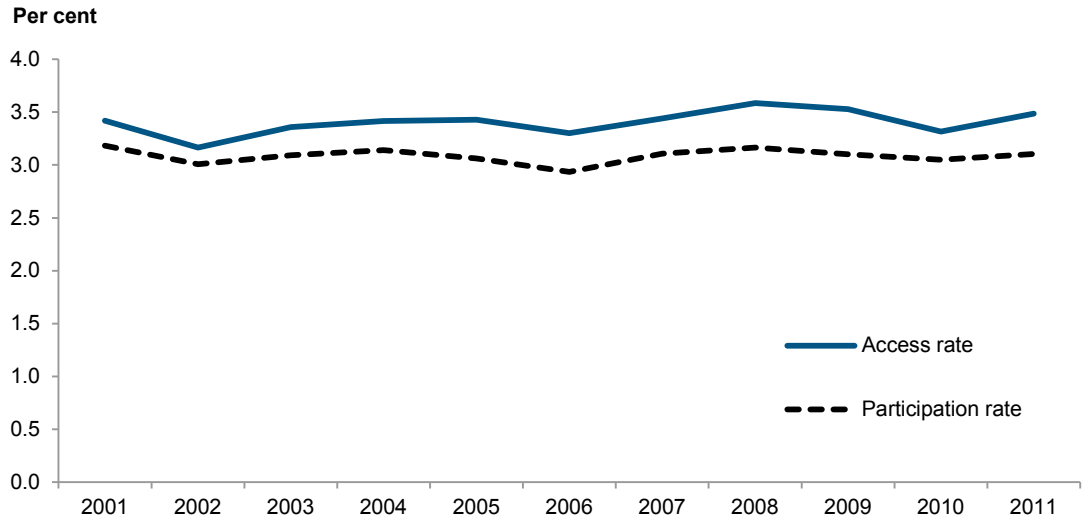
However, these results may depend on the measure used to define SES. For example, McMillan (2005) investigated other indicators of SES, such as parental education and occupation and the secondary school sector attended by the student (government, Catholic or independent). In this study, it was found that of these indicators, parental education had a statistically significant relationship with university attrition rates. The attrition rate of students whose parents had not completed high school was 19% compared with 12% for students whose parents had a degree or diploma qualification.

Marks (2007a) found a similar pattern with course completions, whereby students whose parents had not completed high school were less likely to complete their course. This study also found that parental occupation and school sector had no influence on completions once Equivalent National Tertiary Entrance Rank (ENTER) scores were controlled for.

People from non-English speaking backgrounds (NESB)

NESB students are defined as domestic students and are either an Australian or New Zealand citizen, or Australian permanent resident visa holder. New Zealand citizens, and most permanent resident visa holders (except permanent humanitarian visa holders) are required to pay their student contribution upfront and are not eligible for HECS-HELP, have lived in Australia for less than ten years and speak a language other than English at home. These students may face barriers when accessing services and participating in society due to cultural issues or a lack of English proficiency (AIHW 2012).

Since 2001, while there have been some small yearly changes in the proportions of NESB students, including a steady decline between 1998 and 2007, the proportion in 2011 was the same as in 2001: 3.5% of all commencing domestic students.



Source: DIISRTE 2012b.

Figure 1.5: Percentage of domestic undergraduate students from non-English speaking backgrounds, by year, 2001-2011

Despite some variation between states, data from 2011 indicate that the participation rate of NESB students in undergraduate study is now broadly representative of the general

population using the equity reference values developed by DIISRTE (2012b). The variations by university and jurisdiction are shown in Table 1.4.

Table 1.4: Access and participation rates of domestic undergraduates who were from a non-English speaking background in 2011, by university and jurisdiction

	Range of access rates (university level)	Range of participation rates (university level)	
State/Territory	**Minimum–Maximum**	**Minimum–Maximum**	**Population reference point [a]**
NSW	0.49–7.75	0.46–6.54	4.66
Vic	1.90–6.06	1.55–5.21	4.30
Qld	0.84–4.02	0.84–3.30	2.35
WA	2.81–4.60	2.56–3.84	3.21
SA	3.86–4.54	2.87–4.19	2.50
Tas	1.43	1.43	1.09
ACT	3.67–5.47	3.38–3.62	3.62
NT	3.68	3.21	1.94
Multi-state campuses	2.68	2.37	n.a
Total	**3.49**	**3.10**	**3.09**[b]

(a) DIISRTE Equity Reference Values, 2011. Values are the percentage of NESB people in the general population (aged 15–64) based on the 2006 Census, with some adjustments by the ABS to reflect population changes.

(b) Percentage of Australian population aged 15–64 classified as recent migrants born in a non-English speaking country in the ABS Characteristics of Recent Migrants survey, November 2010.

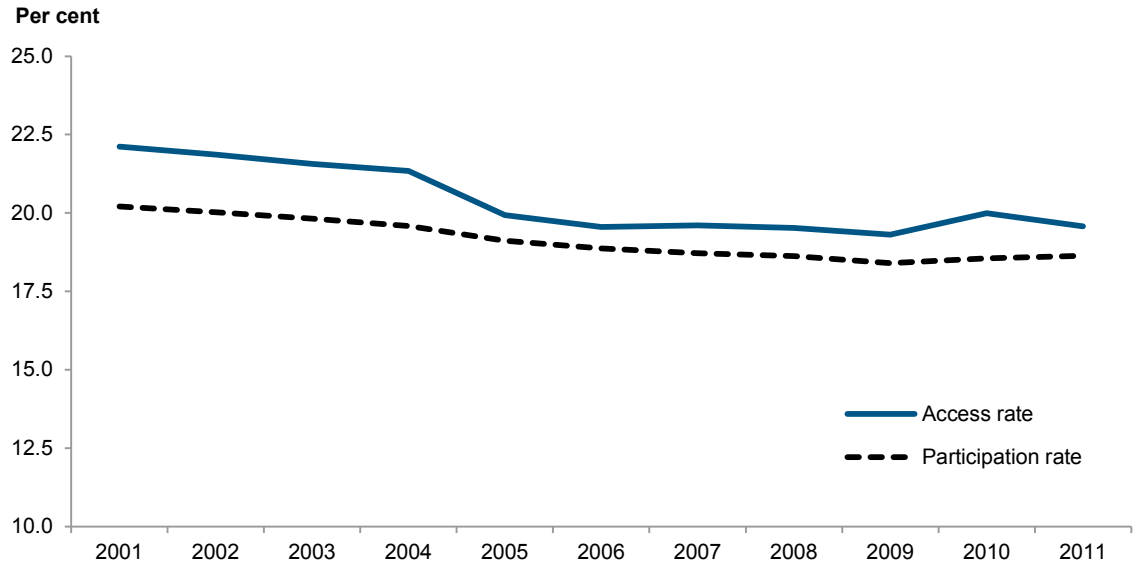
Sources: DIISRTE 2012b; ABS 2011a.

People from regional and remote areas

Regional and remoteness status is determined by the postcode of students' permanent home residence. 'Regional' and 'remote' categories used in this report refer to the MCEETYA (Ministerial Council for Education, Employment, Training and Youth Affairs) categories, which are based on the Australian Standard Geographical Classification (ASGC) with some adjustments specifically developed for Education.

Participation rates are relatively low for students from both regional and remote areas. In 2011, 19.4% of commencing, and 18.3% of all, domestic undergraduate students were from regional areas (in comparison, 29% of Australians aged 15–64 were classified as living in regional areas in the 2011Census) (DIISRTE 2012b; ABS 2012a). Similar levels of inequity occurred for students from remote areas, who comprised 1.2% of commencing, and 1% of all, domestic undergraduate students compared with their representation in the Australian population of 2.3% (DIISRTE 2012b; ABS 2011b).

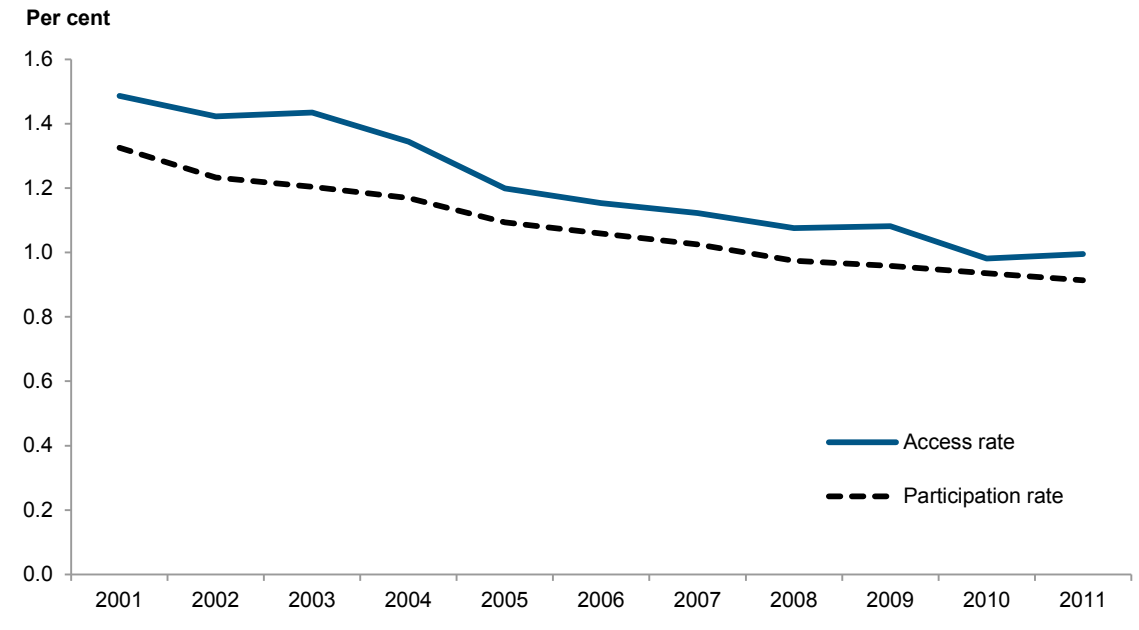
Figure 1.6 shows an overall decline from 2001 and 2011 in the percentage of students from regional areas who were enrolled in university. The percentage of commencing students from regional areas fell from 22.1% in 2001 to 19.3% in 2009, and rose to 19.6% by 2011. A similar decline is evident for the percentage of students from regional areas as a proportion of all students, which hovered at around 18.5% during 2008 to 2011, down from 20.2% in 2001.



Source: DIISRTE 2012b.

Figure 1.6: Percentage of domestic undergraduate students from regional areas, by year, 2001–2011

A more rapid decline in enrolments was notable for students from remote areas during this period (see Figure 1.7). The percentage of commencing students from remote areas fell by a third from 2001 to 2011 (1.5% to 1%), and their percentage among all enrolled students fell from 1.3% in 2001 to 0.9% in 2011.



Source: DIISRTE 2012b.

Figure 1.7: Percentage of domestic undergraduate students who were from remote areas, by year, 2001–2011

The literature is limited in explaining the falling regional and remote student rates. The *Review of Australian higher education* found that the former policy and funding model based on regional loading was inappropriate and unlikely to address falling participation rates (Bradley et al. 2008). Under this model, a regional loading was paid to universities based on the number of students they enrolled at regional campuses. However, the Review noted that not enough of the funding went to isolated campuses that were struggling to maintain viable numbers, and universities claimed that the loading did not reflect the costs of running campuses in remote areas. The Review also noted a lack of incentives for providers to seek opportunities to provide programs in regional or remote areas.

A subsequent review saw changes to regional loading take effect from 2012. The revised formula bases regional loading on the ABS remoteness categories, thereby increasing the loading paid to remote and outer regional campuses and decreasing the loading to inner regional campuses. Such changes may help universities in regional and remote areas achieve and maintain student numbers.

The ranges of the percentage of students at each university who are from regional areas are shown in Table 1.5, while the percentage from remote areas is shown in Table 1.6.

Table 1.5: Access and participation rates of domestic undergraduates from regional areas in 2011, by university and jurisdiction

	Range of access rates (university level)	Range of participation rates (university level)	
State/Territory	**Minimum–Maximum**	**Minimum–Maximum**	**Population reference point[(a)]**
NSW	4.07–59.15	4.12–61.78	23.32
Vic	10.84–70.50	10.36–73.91	24.41
Qld	12.19–65.86	9.99–64.70	29.37
WA	11.54–19.96	10.01–17.43	21.57
SA	13.51–19.96	12.08–17.87	23.73
Tas	43.87	42.74	57.04
ACT	13.14–20.34	13.65–19.51	0.11
NT	53.36	54.56	56.09
Multi-state campuses	11.96	12.14	n.a.
Total	**19.57**	**18.63**	**29.06[(b)]**

(a) DIISRTE Equity Reference Values, 2011. Values are the percentage of people living in a regional area in the general population (aged 15–64) based on the 2006 Census, with some adjustments by the ABS to reflect population changes.

(b) Percentage of estimated Australian population aged 15–64 classified as living in a regional area in 2010 by the ABS. Care should be taken when interpreting this figure as the definition of regional varies between the ABS and the Department (see the 'Definitional and measurement issues of equity groups' section in Chapter 4).

Sources: DIISRTE 2012b; ABS 2011b.

Table 1.6: Access and participation rates of domestic undergraduates from remote areas in 2011, by university and jurisdiction

State/Territory	Range of access rates (university level) Minimum–Maximum	Range of participation rates (university level) Minimum–Maximum	Population reference point[a]
NSW	0.07–1.96	0.07–2.02	0.60
Vic	0.00–0.48	0.05–0.51	0.10
Qld	0.51–4.19	0.40–4.48	3.61
WA	1.74–2.39	1.68–2.06	6.98
SA	1.38–2.20	1.08–1.83	3.74
Tas	0.97	0.90	2.31
ACT	0.24–0.58	0.31–0.36	0.00
NT	12.03	10.53	43.91
Multi-state campuses	0.28	0.29	n.a.
Total	**0.99**	**0.91**	**2.25**[b]

(a) DIISRTE Equity Reference Values, 2011. Values are the percentage of people living in a remote area in the general population (aged 15–64) based on the 2006 Census, with some adjustments by the ABS to reflect population changes.

(b) Percentage of estimated Australian population aged 15–64 classified as living in a remote area in 2010 by the ABS.

Sources: DIISRTE 2012b; ABS 2011b.

Lower aspirations and expectations appear to affect university participation rates among young people from regional and remote areas. A 2008 student survey found that only 38.6% of young people in regional areas and 31.1% of young people in remote areas intended to enrol in university when they finished school, compared with 62.7% of young people from metropolitan areas (Richardson & Friedman 2010). Baxter and others (2011) also reported that parents from regional areas have relatively lower expectations that their children will attend university, compared with parents living in metropolitan areas.

The propensity of students from regional and remote areas to study at university can be influenced not only by proximity to a university campus, but also other factors such as being from a low SES background and living in a regional community (DEEWR 2010b; Richardson & Friedman 2010). Travelling great distances or moving out of home to attend university are not only socially disruptive for students, but can also be financially prohibitive. Polesel (2009) found that regional students were more likely than metropolitan students to defer a university place, often for financial reasons. People from regional or remote areas may also not consider university education as relevant or necessary to their life in these communities (Richardson & Friedman 2010).

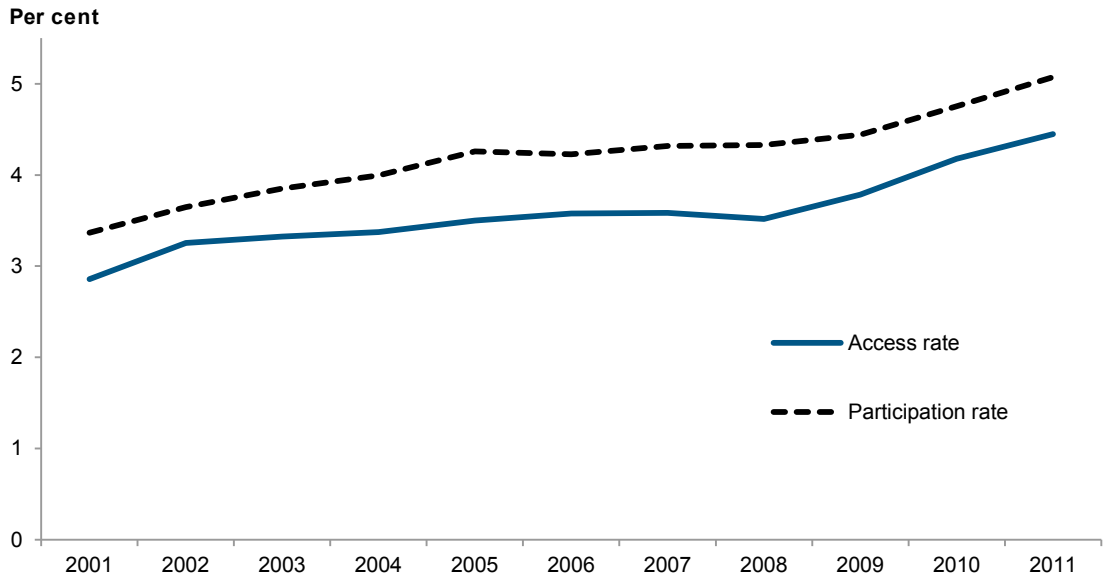
Although regional students are more likely to enrol part-time, they fare nearly as well as the wider student population (Richardson & Friedman 2010). In 2010, the retention rate for regional students was almost the same as for all students (76.4% compared with 78.8%, respectively), as was their success rate (87.1% compared with 87.9%) (DIISRTE 2012b). However, this was not replicated among students from remote areas, whose retention rate in 2010 was 69.7% and whose success rate was 82.7% (DIISRTE 2012b).

When comparing completion rates, Marks (2007a) found no statistically significant difference between metropolitan, regional and rural students when basing results on the address of the school that students attended in Year 9.

People with disability

Students with disability are those who indicate on their university enrolment form that they have a disability, impairment or long-term medical condition which may affect their studies. Therefore, the numbers recorded for this group are dependent on students choosing to identify themselves as having a disability. Self-assessment of disability can depend on a person's health literacy and access to health information and services, which can affect awareness and expectations of health. When assessing their health, people with disability usually take into account their functioning, or ability to engage in everyday activities. From 1981 to 2003, the school participation rate of children and young people with disability increased by 93%, which may have led to a growing trend of young people with disability seeking to enter university after school (AIHW 2010).

In 2011, the percentage of commencing domestic undergraduate students with disability was 4.2% and was 4.8% among all students (DIISRTE 2012b). DIISRTE used a reference value of 8% for the percentage of Australians in each jurisdiction aged 15–64 with disability. This figure was derived from the 2006 Census, but it is unclear what parameters were used to derive it and why the value is the same for each jurisdiction. For comparison purposes, this report lists in Table 1.7 the percentage of people aged 15–64 in the 2009 ABS Survey of Disability, Ageing and Carers in each jurisdiction that were reported to have a disability that restricted their schooling or employment. However, further work on revised population reference points reflecting the 2011 Census figures would be valuable.



Source: DIISRTE 2012b.

Figure 1.8: Percentage of domestic undergraduate students with disability, by year, 2001–2011

Despite a plateau from 2004 to 2008, Figure 1.8 shows that the percentage of commencing domestic students that self-identified as having a disability grew from 2001 to 2011 (2.9% to 4.4%). A similar trend was seen in the percentage among all students, which rose from 3.4% to 5.1% (2001 to 2011).

Unlike the other equity groups, the participation rate of students with disability is consistently higher than their access rate. This is despite the lower retention rates evident among this group in comparison with the wider student population. A possible explanation

for this trend is that more students self-identify as having a disability as they progress through university, however further research is required to determine the reason for this variance.

As with the other measures of equity groups, the prevalence rate of students with disabilities varies between universities and jurisdictions (Table 1.7), ranging from a low of 1.79% of commencing students at one Queensland university to a high of 11.67% of commencing students at one New South Wales university. No information was available on the type of disability.

Students with disability have lower retention and success rates compared with the wider student population; in 2010, their retention rates were 76.2% compared with 78.8%, and their success rates were 83% compared with 87.9% (DIISRTE 2012b). In 2011, students with disability made up 4% of undergraduate completions (DIISRTE 2012b).

Among the university support services available to students with disability are the provision of specialist equipment and software, Auslan interpretation and note-taking services, course adjustment and alternative arrangements for assessment. Government funding for these services is provided by the Higher Education Disability Support Program (HEDSP), and in 2010 Australian universities received over $1 million of funding to encourage the participation of people with disability in higher education through the Performance-based Disability Support component (AIHW 2011).

Table 1.7: Access and participation rates of domestic undergraduates reporting a disability in 2011, by university and jurisdiction

	Range of access rates (university level)	Range of participation rates (university level)	Population reference point (2009)[(a)]	DIISRTE Equity Reference Value (2011)
State/Territory	Minimum–Maximum	Minimum–Maximum		
NSW	2.64–11.67	3.01–11.03	10.05	8
Vic	3.34–5.72	3.23–6.09	10.16	8
Qld	1.79–5.25	2.65–6.48	10.15	8
WA	2.26–7.93	2.74–8.16	10.19	8
SA	5.61–6.58	7.02–8.33	11.84	8
Tas	7.17	9.14	13.86	8
ACT	5.83–6.24	5.50–7.59	8.47	8
NT	5.09	5.51	9.34	8
Multi-state campuses	4.48	5.79	n.a.	8
Total	**4.45**	**5.07**	**10.20**	**8**

(a) Percentage of people aged 15-64, in the Survey of Disability, Ageing and Carers conducted by the ABS from April to December 2009, who were reported to have a disability that restricts their schooling or employment.

Sources: DIISRTE 2012b; ABS 2010a.

Women in non-traditional areas

Although the overall women's participation rate in higher education is higher than men's, women remain under-represented in particular fields of study such as engineering and information technology, and in postgraduate education (Bradley et al. 2008). A 'non-traditional area' is defined as a field of study where less than 40% of participants are women. These fields may vary between universities.

Since 1987, women have made up more than half of Australian university enrolments, compared with a rate of about 1 in 5 in the 1950s (Norton 2012). Reasons for the increase in women's participation rates include their improved social position; their better performance at school; the need for university qualifications for courses dominated by women, such as education and nursing; and the poor vocational education choices available for women, compared with those available for men (Norton 2012).

In 2011, the percentage of women (international and domestic students) commencing in a non-traditional area of higher education was 17.4% and their percentage among all domestic undergraduates was 17.8% (DIISRTE 2012b). As shown in Table 1.8, the percentage of commencing students who are women in non-traditional areas varies between 7.09% of and nearly 30% (at one of the universities in WA).

While data is collected from Table A universities on the access and participation rates of women in non-traditional areas, retention, success and completion rates, these data are not published (although they can be requested).

Currently there is no specific government policy to improve access rates for women in these areas, and this group will not be a primary focus of this paper.

Table 1.8: Access and participation rates of domestic undergraduates who were women studying in a non-traditional area in 2011, by university and jurisdiction

	Range of access rates (university level)	Range of participation rates (university level)
State/Territory	**Minimum–Maximum**	**Minimum–Maximum**
NSW	10.81–25.98	10.63–26.23
Vic	8.60–28.24	8.66–25.49
Qld	15.23–22.90	14.37–21.89
WA	14.24–29.76	13.62–27.37
SA	11.94–16.74	13.00–16.05
Tas	11.81	11.86
ACT	19.96–21.53	19.11–20.75
NT	11.97	11.26
Multi-state campuses	7.09	6.52
Total	**17.44**	**17.80**

Source: DIISRTE 2012b.

Summary

Table 1.9 summarises the current disparities in higher education among the equity groups, by comparing the 2011 national participation rates for Table A providers with population reference points.

The national population reference points are the percentage of the population aged 15–64 in each equity group according to the 2011 Census or other relevant ABS survey. For this reason, the dates of the population reference points are not uniform as the relevant data were available from different sources. Further work is required to determine current standardised population reference points for each equity group. While the Department published Equity Reference Values for most of the equity groups by jurisdiction, it did not specify national

reference values. A revision of the Equity Reference Values, which were originally based on the 2006 Census, could now be set with 2011 Census data.

Table 1.9: National higher education participation rates by equity group

	2011 participation rate (%)	Population reference point (year)	Participation ratio
Indigenous students	1.38	2.55 (2011)	0.54
Students from low SES backgrounds (interim measure)	15.72	25.00 (2011)	0.62
Students from a NESB	3.61	3.09 (2010)	1.17
Students from regional areas[(a)]	18.63	29.06 (2010)	0.64
Students from remote areas	1.00	2.25 (2010)	0.44
Students with disability	5.07	10.20 (2009)	0.50
Women in non-traditional areas	17.80	..	..

(a) Interpret with caution, as the ABS definition of 'regional' varies from the Department's definition, (see the 'Definitional and measurement issues of equity groups' section in Chapter 4).

Sources: DIISRTE 2012b; ABS 2012a; ABS 2011a; ABS 2011b; ABS 2010a.

A participation ratio of 1 reflects the appropriate representation of the equity group in the student population. Even so, the population reference points do not reflect the current policy target rates for university participation among each equity group. The rationale of the *Review of Australian higher education* (2008), when determining target rates, was to identify rates that reflected current performance; were achievable and comparable to high-performing nations; and that looked to Australia's future needs.

Also, care should be taken when interpreting these rates at the university level. The national policy targets are sector-wide targets, and not every university is expected or required to achieve that level. Some universities, depending on their location, culture and courses offered, will achieve participation rates higher than the target; for the same reasons, others will struggle to ever reach the targets.

2 Conceptual framework

As demonstrated in Chapter 1, there are both significant disparities in higher educational attainment between groups in Australia and a range of policies and programs designed to improve equity in higher education. Developing a measurement framework will be critical to assessing progress towards improving equity as well as identifying where gaps continue to occur. It is important, however, that the measurement framework is conceptually based and is able to capture both the determinants of participation in, and completion of, higher education, as well as the policy and systemic inputs and processes that may help or hinder progress towards the goal of improving equity.

Conceptual frameworks underpin measurement frameworks by graphically representing evidence-based relationships between domains or elements that predict the outcome of interest. They are used to help select particular indicators that measure these elements or domains in a reliable and valid manner. These indicators then make up the measurement framework itself.

There are several key questions in attempting to understand why students from particular groups are less likely to attend or complete university that require an understanding of the higher education pathway itself (shown in Figure 2.1). This figure is a simple way of representing the key decision points within the higher education pathways; in practice there is a great deal of complexity associated with the key decision points and many influencing factors. Figure 2.1 is about key decision points of the journey within the university cycle.

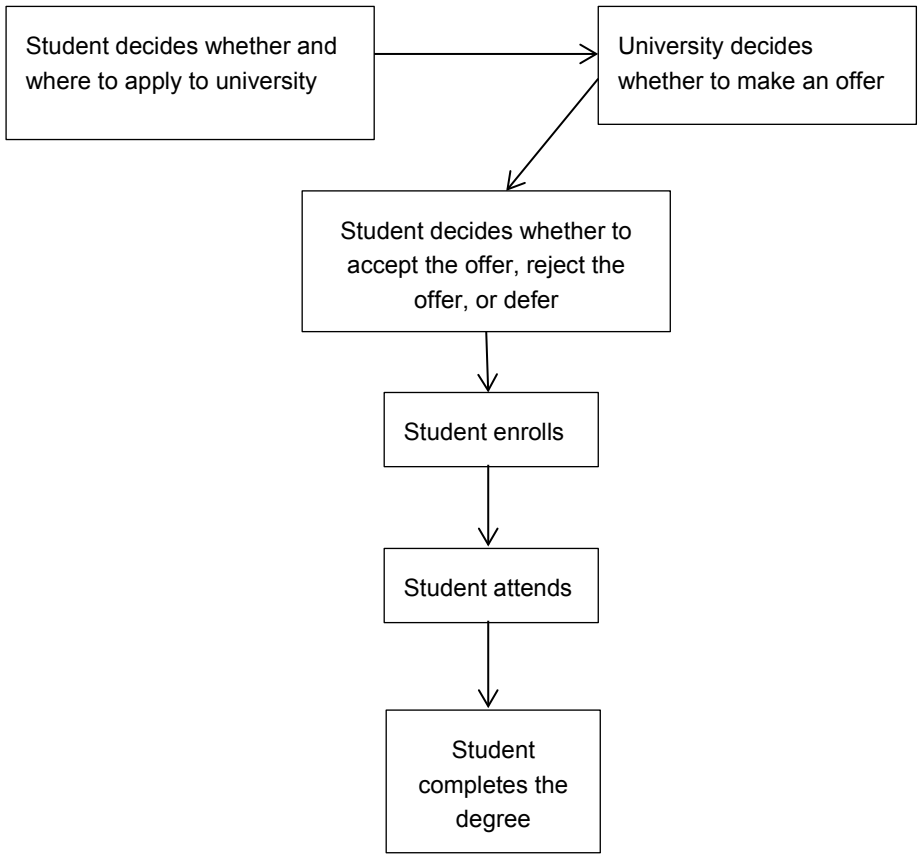


Figure 2.1: Higher education pathways

Students do not just randomly attend university—they must first make the decision to apply to university, and they must be accepted. If they get an offer, they then have to decide whether to accept it, reject it, or defer it. If they decide to accept the offer, they must enrol and then attend and complete their coursework successfully in order to earn their degree.

From a research and policy perspective, it is important to know at what point(s) in the pathway inequity exists. That is:

- Are students from particular equity groups less likely to perceive higher education as a valuable and attainable goal for their own lives?
- Are students from particular equity groups less likely to apply to university?
- Are there differences in the scores achieved for acceptance to university by equity group?
- Are students from particular equity groups more likely to choose different pathways into university? For example, are they older, or more likely to come from vocational education or tertiary preparation pathways?
- Are students from particular equity groups less likely to be accepted to university once they have applied?

- Are students from particular equity groups less likely to accept offers, enrol, attend, transfer, change and complete their university degrees?

These are important questions for a number of reasons. Not only do they have implications for what types of outcomes should be measured, but they also illustrate that there may be a very different set of programs and policies required. These programs and policies may need to focus on improving access to early childhood education; improving primary and secondary school experiences; increasing aspiration and application to university; and improving student retention and support once students have enrolled in university.

A focus only on university experience misses an important part of the picture. It is important to recognise that there are significant individual, family, structural, and policy factors that affect a child's health, development, and their eventual educational attainment. That is, it is important to take a life-course perspective when examining differences in the trajectories or pathways that lead to the outcome of interest (improving equity in higher education attainment).

Figure 2.2 presents a conceptual framework of the sets of factors that affect application to university (taking that as the key first step—students cannot enrol in university if they have not applied). The framework illustrates the complexity of the factors underpinning current inequities in higher education and shows that a substantial part of the variation in educational outcomes is linked to forces outside the education system—including family socioeconomic status, language, ethnicity, and immigration status.

The framework also explicitly acknowledges the role of policy settings in influencing the conditions under which people participate in higher education. For example, recent COAG policies have focused on ensuring that all Australian children, and Indigenous children in particular, have access to 15 hours a week of high quality early childhood education in the year before they begin school. The Low SES School Communities National Partnership Agreement increased resources to primary and secondary schools in areas with entrenched socioeconomic disadvantage to allow them to address the particular needs of students and families in order to improve educational outcomes.

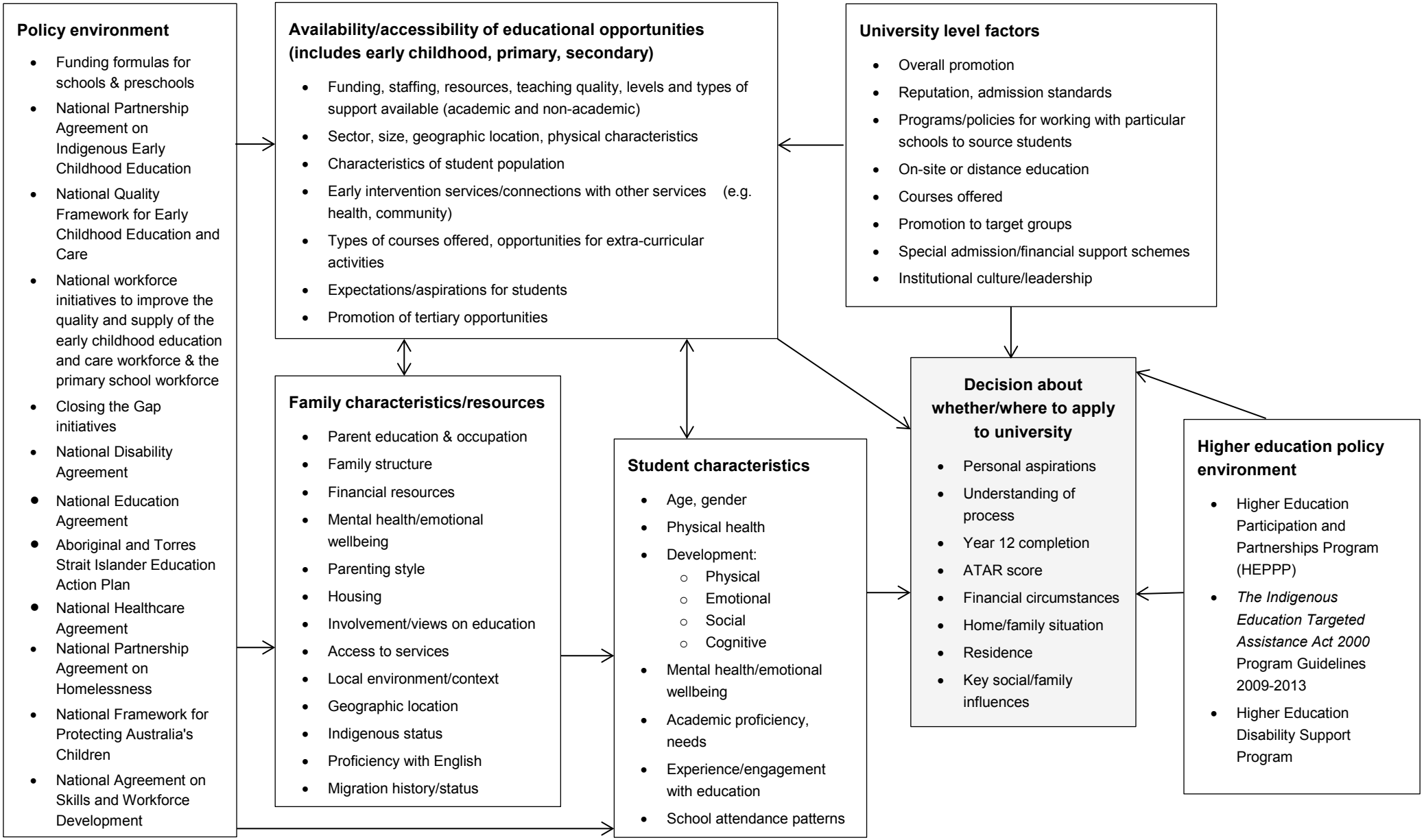


Figure 2.2: Conceptual framework of factors predicting application to university

While the key outcome in Figure 2.2 is the decision about whether/where to apply to university, similar sets of factors affect the other key points in the higher education trajectory: acceptance, enrolment, retention, and completion. The main difference would be in a detailed focus on the potential impact of university level-factors and policies in supporting students from equity groups throughout this process.

Discussion

Barriers to participation in the higher education system may be grouped according to common factors (Levin 2003): dispositional, situational and systemic.

- Dispositional barriers have to do with potential learners' motivation and sense of efficacy. Some students may have very little sense of what tertiary education is about and very few role models to draw on.
- Situational barriers have to do with students' living situation. For example attendance may be more difficult if students have young children, or do not live close to a tertiary institution, or have to be employed part-time to finance their studies.
- Systemic barriers lie in the tertiary institutions themselves. For example poor access to program information; lack of access to, or attention from, instructors; difficult timetabling provisions, requirements for full-time study, unfair admission rules, or other inflexible institutional policies.

The conceptual framework demonstrates that these barriers themselves are affected by factors such as family characteristics and resources, students' own characteristics, the policy environment, and the availability/accessibility of educational opportunities at the early childhood, primary/secondary school, and university levels. Below we review some of the key findings on these relationships, acknowledging their complexity and inter-relationship.

Socioeconomic status

There is a significant research literature that links socioeconomic status with children's health, their development, their access to high quality early childhood education, the primary and secondary schools they attend and their experiences there, and their aspirations, all of which are linked to university application and completion.

The connections between family background and educational performance are well established (OECD 2010):

- More highly educated parents may invest more time and energy into educating their children and/or guide their daily interactions in ways that help their children succeed at school.
- Certain household amenities, such as a quiet place to study or a desk, may provide an advantage for children.
- Wealthier families will generally be able either to provide more educational resources at home or to choose schools that will supply them with these resources.
- If a school is located in a city, students may enjoy additional resources nearby, such as public libraries and museums, which support learning.
- Other students may struggle with individual challenges, such as an immigrant background, speaking a different language at home or having only one parent to turn to for support and assistance.

Children from higher socioeconomic backgrounds are also likely to be advantaged in terms of health, access to resources, and to benefit from parenting practices such as reading books to their children.

The significance of SES, and its interplay with the school system itself, is highlighted in the findings from the international PISA (Programme for International Student Assessment) study, launched by the OECD in 1997. It aims to evaluate education systems worldwide every three years by assessing 15-year-olds' competencies in the key subjects: reading, mathematics and science. Detailed analysis from the 2009 PISA found the following (OECD 2010):

- The best-performing school systems manage to provide high-quality education to all students.
- Disadvantaged students may have access to more teachers, but not necessarily to the best teachers. (For Australia, the correlation between socioeconomic background and the quality of educational resources was significantly higher than the OECD average).
- Home background influences educational success, and schooling often appears to reinforce its effects. Although poor performance in school does not automatically follow from a disadvantaged socioeconomic background, the socioeconomic background of students and schools does appear to have a powerful influence on performance.
- Regardless of their own socioeconomic background, students attending schools with a socioeconomically advantaged intake tend to perform better than those attending schools with more disadvantaged peers.
- Students in urban schools perform better than students in other schools, even after accounting for differences in socioeconomic background.
- On average across the OECD, 17% of students come from single-parent families and they score five score points lower than students from other types of families after accounting for socioeconomic background. (Australia was very close to the OECD average.)

Although Australia's mean reading score was higher than the OECD average (515 versus 493), the slope of the socioeconomic gradient was steeper (46 versus 38). That is, the Australian system was associated with lower-than-average equity, in that the success of students depended to a greater extent on their family background or the socioeconomic background of their school. High-performing countries that scored well in terms of equity included Korea, Finland, Canada and China (OECD 2010).

These findings are reinforced by other research as well. Secondary students from low-SES backgrounds are less likely to aspire to attend university (James 2002). In a survey of 7000 Year 10–12 students, 42% of students from low SES backgrounds intended to apply to university, compared with 50% from medium SES and 70% from high SES backgrounds. Young people from low SES backgrounds have also been found to be less likely to apply to university because they have less confidence in their academic abilities, less confidence that their parents want them to attend university, a stronger urge to begin earning an income after finishing school and a greater belief that vocational education would be more useful to them than university (James 2002; James et al. 2008).

Lower secondary school completion rates among people from low SES backgrounds also reduce the number of applications to university. In 2006, 59% of students from low SES backgrounds completed Year 12 compared with 64% from medium SES and 78% from high SES backgrounds (James et al. 2008).

Students who have low levels of academic achievement are more likely to leave school early or not achieve the marks required to attend university (James et al. 2008). PISA results indicate that Australian students from low SES backgrounds generally perform worse than students from high SES backgrounds in reading, mathematical and scientific literacy (Thomson et al. 2010).

Marks (2005) found that students who were not offered a university place after applying were more likely to have lower literacy and numeracy achievement scores in Year 9. McMillan (2005) also found that attrition rates were lowest among students who were high academic achievers at school. In an analysis of participants in the Longitudinal Surveys of Australian Youth (LSAY), McMillan (2005) also found that parents' education level was found to be related to student attrition rates. Students were less likely to leave university before completing their course if their parents had completed university. Similarly, Marks (2007a) also found that completion rates were lower among students whose parents had not completed secondary school.

Despite students citing financial factors as barriers to entering university, they do not appear to play a significant role in university access and participation rates (James et al. 2008). McMillan (2005) also found no relation between receiving Youth Allowance and attrition rates among students, suggesting that household income is not a predictor of university course completion. However, recent research has demonstrated that undergraduate students from low SES backgrounds were less likely to be receiving financial support from their parents, were more likely to miss classes because of their work commitments, and were more likely to go without food or other necessities than students from higher SES backgrounds Bexley et al. 2013), which may affect their experiences during university.

Thus, when coupled with other inhibiting factors, financial pressures may make university seem less attractive, relevant and attainable to students (James et al. 2008).

Indigenous status

The *Review of higher education access and outcomes for Aboriginal and Torres Strait Islander people* (Behrendt et al. 2012) denotes that improving the outcomes for Indigenous people will contribute to reducing Indigenous disadvantage and contribute to the welfare of the nation. Furthermore, producing graduates from higher education will address disadvantage, assist Indigenous people to achieve their potential and make a contribution to closing the gap between Indigenous and non-Indigenous Australians.

Historical factors such as cultural exclusion, poorer educational outcomes, poorer health, poorer access to services, and discrimination have led to higher rates of poverty and social exclusion for Indigenous Australians. The consequences of exclusion include limited opportunities, higher rates of chronic and preventable illnesses, higher rates of psychological distress, and concentrations of multiple and entrenched disadvantage within particular communities (both Indigenous and non-Indigenous).

The impact of social exclusion and disadvantage on children is significant. They are less likely to be born healthy, are more likely to live in unsafe neighbourhoods, more likely to be exposed to violence, more likely to be exposed to environmental toxins, and have lower access to and lower use of quality early childhood education and development services. These result in poorer school readiness, which diminishes their ability to take advantage of educational opportunities.

High quality schooling and services which address Indigenous students' and children's needs in a culturally appropriate and effective manner can help overcome some of these

issues. COAG Closing the Gap policies formally recognise the interplay of all these factors (or building blocks), and acknowledges that closing the gaps in factors such as life expectancy and adult employment require investment in health, housing, education, and employment throughout the life course.

Indigenous students may also belong to multiple equity or risk groups, including low SES and regional/remote residence. Some of the research findings related to the lower attainment in higher education Indigenous students are highlighted below.

Academic Achievement

Low academic achievement is cited as a common factor influencing both Year 12 completion and entry to higher education (Lamb et al. 2004). The gap in literacy and numeracy between Australia's Indigenous and non-Indigenous students has consistently been reported in the OECD Programme for International Student Assessment (PISA) 2000, 2003, 2006 and 2009. In PISA 2009, compared to non-Indigenous students, Indigenous students scored, on average, 79 points lower, a gap equal to approximately 2 and a half years of formal schooling. Furthermore, the Indigenous Higher Education Advisory Council found the English literacy level of many Indigenous students to be a significant barrier when considering higher education and having the preparedness to commence study at university (James & Devlin 2005). As a result of the educational disadvantages experienced, many Indigenous students have a 'low academic self-concept,' and lack confidence in their academic ability which results in lower aspirations for higher education. The *Review of higher education access and outcomes for Aboriginal and Torres Strait Islander people* (Behrendt et al. 2012) proposes that outreach programs starting in primary school as well as mentoring and academic support are ways to build aspirations within the Indigenous school student population.

Aspirations

In a study of aspirations, Craven and others (2005), found Indigenous students are not engaging in further education opportunities to the same extent as non-Indigenous Australians. Statistically significant results showed Indigenous students aspired to leave school early in comparison with non-Indigenous students; more Indigenous students aspired to go to technical and further education (TAFE) institutes in comparison with non-Indigenous students; and more non-Indigenous students aspired to go to university in comparison to Indigenous students. This study highlights that Indigenous students tend to set their schooling and post-schooling aspirations at lower levels compared with their non-Indigenous peers. This may be in part due to the fact that Indigenous students have a weak knowledge base of post-schooling options as well as facing societal or school-based lower expectations. For example, Indigenous students, in comparison with non-Indigenous students, were less likely to know what sort of job they would like or what sorts of further education and training were available to them after they left school (Craven et al. 2005).

Limited knowledge of career pathways

Indigenous students often lack the knowledge of career pathways (Craven et al. 2005; Lamb et al. 2004; James & Devlin 2005). This is perhaps due to the nature of career counselling in schools whereby they might have to approach the career advisor for advice. In addition, families may not have the capacity to provide advice about options and possibilities if no member of the family has previously attended university, limiting Indigenous students' understanding of what tertiary study entails and the long-term social and economic benefits of higher education.

Limited knowledge regarding career pathways is further heightened in the qualitative study of Hossain and others (2008) in which no participating student had any knowledge of the Indigenous Higher Education Pathways Program. One participant stated that 'it's just too hard to find how to get in' (p.12), indicating a lack of information about university assistance and support.

Retention, success and completion in higher education

A number of complex factors contribute to Indigenous students' low levels of retention and completion rates of higher education. Distinctive demographic characteristics associated with barriers to participation include age, location, type and mode of study (James & Devlin 2005). On average, Indigenous students tend to be older than other Australians when commencing higher education courses, and may therefore be more likely to have dependents, which may contribute to their lower levels of retention and completion. The *Review of higher education access and outcomes for Aboriginal and Torres Strait Islander people* (Behrendt et al. 2012) proposes that a fundamental shift is required for Indigenous students to succeed at university, with students requiring access to a range of assistance in the form of social, financial and academic support requiring a whole of university effort.

Disability

Learning mode

Students with disability are more likely to enrol in courses that offer distance learning because this mode is considered to be less daunting for them. The acceptance of internet-based learning at universities has also provided more educational options for students with disability (National Board of Employment, Education and Training 1996).

Support services

The support and information offered by secondary schools to students with disability has been found to help these students make an easier transition to tertiary education (OECD 2011). Similarly, the availability of specialist support services at universities also improves the retention rates of students with disability (Long et al. 2006).

Secondary school completion

Secondary students with disability are less likely than other students to complete secondary school, especially those with a specific learning difficulty, behavioural difficulties or psychological problems (OECD 2011).

Social isolation

Long and others (2006) found that 19.5% of students with disability who had withdrawn from their course reported that social isolation was an important factor in their choice to discontinue.

Academic difficulties

Out of the students who had withdrawn from university education in first semester 2005, 40.4% of students with disability cited academic difficulties as the reason for discontinuing (Long et al. 2006). The reasons given by these students for their academic difficulties include poor quality teaching, lack of teacher engagement, lack of flexibility in assessment and workload concerns.

Non-English Speaking Background

Marks and others (2000) found that ethnicity (defined as students whose father was born in a non-English speaking country) correlated with higher participation rates in university. This result could not be explained by socioeconomic factors or school achievement, which suggests that other cultural factors may be at play, including the emphasis migrant families place on education to improve their children's chances of a better life. Secondary students whose parents were born in a non-English speaking country were also more likely to complete Year 12 (Lamb et al. 2000). It has been suggested that these results indicate that the definition of 'NESB' is too broad to be relevant in identifying disadvantage among students (Marks et al. 2000).

A University of Queensland study found that there were differences in university participation within the NESB group (Scull and Cuthill 2006). For example, students from Pacific Islander backgrounds had low university access rates, whereas students from Vietnamese backgrounds were over-represented at university. The difference between the two groups was attributed to the high expectations Vietnamese parents had for their children to attend university, in comparison to Pacific Islander parents who were generally less likely to be engaged with their children's schooling.

Being from a non-English speaking background was also found to be more of a disadvantage for mature-age applicants whose overseas qualifications and prior learning may not be recognised in Australia (Scull and Cuthill 2006).

Regional and remote areas

The Department of Education, Employment and Workplace Relations (2010b) report *Regional participation: the role of socioeconomic status and access* found that factors for lower participation in higher education in regional areas can be related to either location or individual level factors.

Location related factors

Access

Access to university campuses is often cited as an explanation to lower participation rates with location, travel and costs acting as barriers to study (Edwards & Marks 2008; James et al. 1999; Marks et al. 2000; Stevenson et al. 2001). Access is also influenced by the type of university and courses on offer.

Costs

The literature also lists the costs of relocating to metropolitan areas to attend university as another barrier to participation for students from regional areas. Godden (2007) examined the financial barriers for regional students, estimating the annual cost for regional students to study away from home as ranging between $15,000–$20,000 per year.

Year 12 retention rates

Historically, non-metropolitan areas have lower Year 12 retention rates than metropolitan areas, in part due to limited quality school resources (Cresswell & Underwood 2004; Lamb et al. 2004; Marks 2007b). Consequently, if students haven't completed Year 12, they don't have the capacity to enter university and therefore are limited in their ability to participate in higher education.

Individual factors

Socioeconomic status

Socioeconomic status is cited as a major influence on higher education participation (James et al. 1999; Kryger 2008; Stevenson et al. 2001). Stevenson and others (2001) found SES made a larger contribution than access to the difference in participation rates between metropolitan and non-metropolitan areas. Long and others (1999) found the socioeconomic characteristics of students from rural schools were associated with lower educational participation, confirming that socioeconomic background has a significant influence on the likelihood of a person participating in higher education.

Aspirations

Location is found to influence young peoples' aspirations for higher education. For example, James and others (1999) found rural students less likely than urban students to believe university would provide the chance for an interesting and rewarding career. James (2000) highlights the difference in aspirations for higher education by determining the strongest interest from among urban students, followed by aspirations from rural students and the least aspirations from among isolated students.

Other sections of the educational sector

Early childhood education

The association between low socioeconomic status and poorer outcomes for children is well established, but the actual causal relationships are complicated. Low socioeconomic status reflects a combination of low income/low education/low social capital; higher likelihood of living in poorer or higher risk neighbourhoods with poorer access to services; poorer parental health status (physical and emotional); and different parenting styles. Thus, policies or programs designed to mitigate the impact of low socioeconomic status need to recognise the impact of all of these factors.

Research has shown that the most effective programs for high risk children (as defined by socioeconomic status) are those that work with both children and parents, and are able to link parents in with local community services and supports (eg. HIPPY—Home Interaction Program for Parents & Youngsters). Numerous studies demonstrate that there are significant cognitive, social, and developmental benefits to attending a high quality preschool/early childhood education program and that children who attend preschool are better prepared for the transition to school (Sammons et al. 2004).

The benefits of preschool programs and other early childhood intervention programs can be particularly beneficial for children from disadvantaged families (for example, the Perry Preschool program and HeadStart in the U.S. and the HIPPY program in Australia). Currently, however, access and participation in high quality preschool program is lower among those children at greatest risk of poor educational outcomes in school: Indigenous children; those from regional or remote areas; those from NESB; those from families with poorer socioeconomic status (AIHW 2009).

Recognising these inequalities, in 2009 COAG endorsed the National Partnership Agreement on Early Childhood Education to ensure that by 2013 all Australian children would have access to high quality preschool education for at least 15 hours per week in the year before school. In addition, the National Partnership Agreement on Indigenous Early Childhood Development (part of the COAG Closing the Gap agenda) provided additional funding for

39 Children and Family Centres which would both expand access to high quality early childhood education as well as to broader health and developmental services.

Early schooling

In most countries per-pupil spending is higher in secondary and tertiary education than in early childhood or primary schooling (Levin 2003). However, emerging evidence suggests that early childhood development is a critical determining factor for a range of social, health and economic outcomes later in life.

Many of the inequalities that exist within school systems are already present when students enter formal schooling. In the PISA results, students who attended pre-primary education for more than one year outperformed students who did not, even after accounting for socioeconomic background (OECD 2010). However, the cross-country variation in the estimates suggested that the quality of pre-primary education was important in terms of reading outcomes.

Secondary schooling

The successful completion of secondary school is typically the pathway for most individuals entering higher education. Increasing the proportion of young people who leave secondary school with a minimum university entrance score is a precursor to increasing participation in higher education. The reasons students drop out of secondary school are many and varied. As well as academic difficulties, personal and family problems and substance abuse are also important factors. Keeping students engaged with school and offering appropriate support systems should help decrease the drop-out rate.

Rates of higher education eligibility are also affected by the nature of the different educational pathways that secondary schools offer. Many schools now offer a choice of trajectories—some vocational in nature and others that are more academic.

Making a choice to follow a non-academic trajectory will significantly reduce the probability of a student undertaking higher education. Early streaming of students into vocational pathways with a high degree of stratification is 'likely to support and reinforce a differentiation of transition outcomes by social class' (OECD 2000; Levin 2003). Comparisons of the performance of secondary students compared to primary level suggested that early tracking was associated with reduced equity in outcomes and sometimes with weakened results overall (Field et al. 2007).

Increasing rates of university enrolment may require delaying the age at which such a decision is taken; designing syllabi that can adapt to a student's changing interests and skills; offering hybrid trajectories; and/or making sure the decision is made with a full-information set.

Alternatively, feasible options for 'mature-aged' students to undertake equivalent university entrance courses should be easily accessible. Across OECD countries, many adults and young dropouts without basic education obtain school qualifications through second-chance programmes. In the United States, almost 60% of dropouts eventually earn a high school credential (Field et al. 2007).

The PISA results suggest that improving student motivation is related to teaching methods, support services, and the level of personal connection students feel with teachers and school. A 2007 OECD report by Field and others argues that education systems need to be fair and inclusive in their design, practices, and resourcing. It proposes ten steps which would reduce

school failure and dropout, make society fairer and avoid the large social costs of marginalised adults with few basic skills.

Implications

The conceptual framework and discussion presented in this chapter have several key implications for the development of the MFE:

- Outcome indicators need to include measures of all key points in the higher education trajectory (for example, application to university through to completion) in order to identify gaps and progress.
- The determinants of higher education attainment are complex, and it is important to be realistic about the impact of potential interventions.
- The education system itself plays a critical role in ameliorating (or perpetuating) the existing disparities between groups, and is in turn influenced by specific policies and programs, all of which need to be taken into account in the measurement framework.

3 Addressing inequity in higher education

Developing potential indicators for consideration in a measurement framework for equity in higher education requires an understanding of how it has been framed as a policy issue, the government's response, and what targets have been set.

Policy objectives and targets

In 1990, the discussion paper *A fair chance for all* (DEET 1990) defined Australia's national equity objective for higher education: '*to ensure that all Australians from all groups in society have the opportunity to participate successfully in higher education. This will be achieved by changing the balance of the student population to reflect more closely the composition of society as a whole*.'

The paper also identified the 6 equity groups that have been the focus of government policy and support since then:

- Aboriginal and Torres Strait Islander Australians
- people from low SES backgrounds
- people from non-English speaking backgrounds (NESB)
- people from regional and remote areas
- people with disability
- women in non-traditional subject areas.

Although some of the names have changed since 1990, the groups are essentially the same.

Since 1990, a series of key reports have been undertaken which have:

- progressed the development of data and indicators to measure progress against the objectives (for example, Higher Education Performance Indicators Research Group 1991; Martin 1994)
- reviewed progress made towards achieving the equity goals (National Board of Employment, Education and Training 1996; Nelson 2003 Bradley et al. 2008; Behrendt 2012).

In response to these reports, over time the government has:

- set specific equity targets at the national level
- continued to provide and expand its support for equity in higher education in order to meet those targets.

The *Review of Australian higher education* (Bradley et al. 2008) recommended that the government focus on 2 targets: the proportion of the population attaining a higher education qualification, and the higher education participation rate of disadvantaged students. The Review also suggested that specific targets be set for the most seriously under-represented groups and that the government set policies and provide the funding and support required to meet those targets (presented in Table 3.1).

Table 3.1: Suggested targets for under-represented groups of students in higher education (Bradley et al. 2008)

Student group	Measure	Target
Low SES	Access rate	20% based on current postcode methodology or representative of the population share for the new low SES measure developed.
	Completion rate	At least 95% of the rate for high SES students.
Regional students	Access rate	Proportion of the population aged 15–64 years in regional areas as defined by the ARIA classification in the 2006 Census.
	Success rate	Same rates as for metropolitan students.
	Retention rate	Same rates as for metropolitan students.
	Completion rate	Same rates as for metropolitan students.
Remote students	Access rate	Proportion of the population aged 15–64 years in remote areas as defined by the ARIA classification in the 2006 Census.
	Success rate	Same rates as for metropolitan students.
	Retention rate	At least 90% of that for metropolitan students.
	Completion rate	At least 90% of that for metropolitan students.
Indigenous students	Access rate	Proportion that the Indigenous population aged 15–64 years represents within the general population in this age group in the 2006 Census.
	Success rate	At least 95% of the rate for non-Indigenous students.
	Retention rate	At least 90% of the rate for non-Indigenous students.
	Completion rate	At least 90% of the rate for non-Indigenous students.

Source: Bradley et al. 2008.

In response, the government announced that it would seek to achieve the following targets proposed by the Review:

- 40% of all Australian 25–34 year olds to have attained at least a bachelor-level qualification by 2025
- 20% of higher education enrolments at the undergraduate level to be people from low SES backgrounds by 2020 (Commonwealth of Australia 2009).

Although only the low SES target was formalised, the other recommended targets continue to be monitored. One of the key issues, however, is the lack of reference points for parity and target dates for groups other than low SES. For example, one of the tasks of the *Review of higher education access and outcomes for Aboriginal and Torres Strait Islander people* (the Behrendt Report) was to provide advice on measuring and achieving parity for Aboriginal and Torres Strait Islander students, researchers and academic and non-academic staff (Behrendt et al. 2012).

The Behrendt Report interpreted parity as 'equity' or 'equivalence' of participation and outcomes in higher education between Aboriginal and Torres Strait Islanders and non-Indigenous Australians. It recommended the parity target for Aboriginal and Torres Strait Islanders student enrolments be based on the proportion of the total population aged 15–64 who are Aboriginal and Torres Strait Islander. The initial parity target would be set at 2.2%, based on the 2006 Census (ABS 2006) and revised in line with new population data following each census.

Preliminary modelling from the department indicated that 2030 might be a feasible reference date for the parity target for enrolments for Indigenous students. However, the Behrendt

Report recommended that universities set their own targets and timeframes, as they are in a better position to track their cohorts, and encouraged the department to undertake more complex modelling.

Funding and support

As part of its commitment to equity in higher education, the government has supported a wide range of strategies to improve access, retention and completion rates of students from equity groups.

These programs include the:

- **Higher Education Participation and Partnerships Program** (HEPPP), which provides funding to universities to increase the access, retention and success rates of domestic students from low SES backgrounds in undergraduate study. The HEPPP consists of two components: a partnerships component to assist universities to develop activities in partnership with primary and secondary schools, VET providers, state and territory governments, community groups, other universities, and other stakeholders to raise the aspirations and build the capacity of people from low SES backgrounds to participate in higher education; and a participation component.
- **Higher Education Disability Support Program** (HEDSP), which funds higher education providers to provide support and equipment to assist students with disability to participate in higher education, as well as to implement strategies to attract and support these students.
- **Indigenous Support Program** (ISP), which provides financial grants to higher education providers to assist them to meet the needs of their Aboriginal and Torres Strait Islander students and to advance the goals of the National Aboriginal and Torres Strait Islander Education Policy (AEP). The types of activities supported under the ISP include the establishment and management of Indigenous Education Units, assistance with study skills, personal counselling and cultural awareness activities.
- **Commonwealth Scholarships Program,** which aims to improve access to and participation in higher education by Aboriginal and Torres Strait Islander students from low SES backgrounds and from regional and remote areas by assisting with the costs associated with education and relocation.
- **Enabling loading** (included in the Commonwealth Grants Scheme), which funds universities to provide enabling courses help prepare students for higher education and provide a pathway to university for students who would otherwise not be qualified. These courses include bridging courses that assist students to meet course entry requirements, and remedial courses that develop skills in areas such as maths or science.
- **Regional loading**, which helps universities offset the higher costs of operating in regional areas.
- **Away from base,** which covers travel costs for Indigenous vocational education and training (VET) and higher education students studying an approved 'mixed-mode' course. A 'mixed-mode' course is a nationally accredited course that is delivered through a combination of distance education and face-to-face teaching for students who are based in their home communities and undertake occasional intensive study periods on campus.. These courses include bridging courses that assist students to meet course

entry requirements and remedial courses that develop skills in areas such as maths or science.

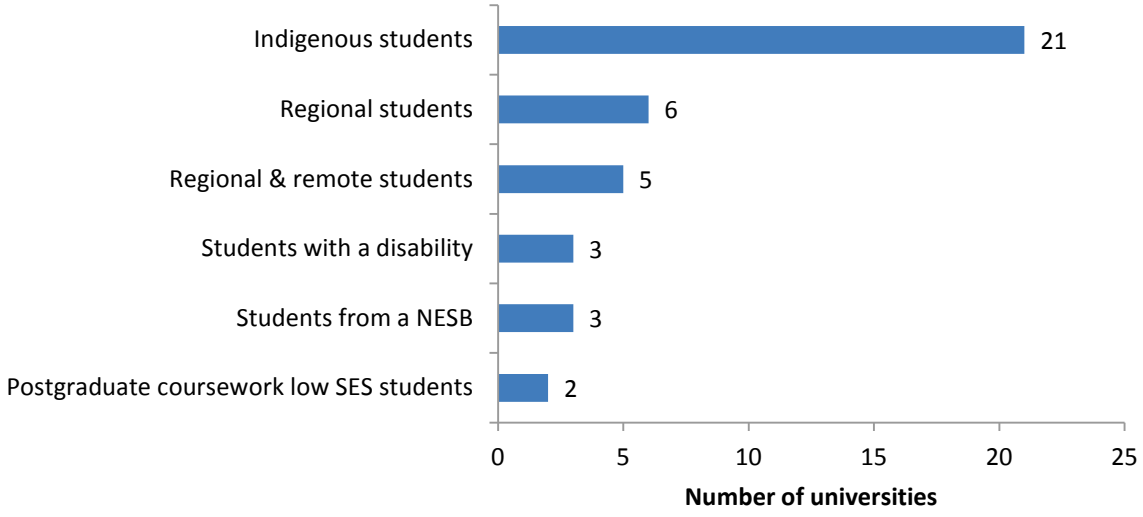
- **Indigenous Tutorial Assistance Scheme for Tertiary Tuition (ITAS-TT),** which supports supplementary tuition to Indigenous students studying university award level courses, and some specified Australian Qualifications Framework accredited vocational education training courses at ITAS funded institutions. Tuition is available only for subjects in a student's formal education program and is not usually available for basic literacy, numeracy, enabling and bridging courses.

In addition to these programs, the Australian Government paid **Reward Funding** to universities which met quantitative targets for improving participation and social inclusion. Reward Funding performance targets were specified in each university's 2011–2013 Compact, which was an agreement between the university and the government on the university's strategies for achieving the government's objectives for higher education.

All universities have government-agreed performance targets for increasing the proportion of domestic undergraduate students from low SES backgrounds. These target percentages are either improvement or excellence targets. Excellence targets are adjusted to each state to reflect the number of people from low SES backgrounds in the population—and are set against the sector-wide participation target of 18.5% by 2014–15. Ten universities, mostly regional, had excellence targets since their baseline percentages were already above the state adjusted excellence levels. The other universities were given improvement targets of a 0.25% increase in 2012 from baseline, and a 0.65% increase in 2013 from baseline. The baseline for the low SES target is the university's 2009 participation rate.

Universities also chose another under-represented group target. Figure 3.1 shows the chosen secondary target groups and the number of universities that target them. No universities have chosen women in non-traditional areas as their secondary target, and the University of Melbourne and Curtin University of Technology have chosen to focus on postgraduate coursework students from low SES backgrounds.

The improvement targets for these secondary target groups were set by the department and were based on the 2008 to 2009 percentage point growth across all universities for the group. The required 2012 annual increase was 0.25 standard deviations of this figure, and the 2013 annual increase was 0.75 standard deviations. Universities could choose to use their 2009 participation rate as their baseline, or an average of their rates in 2008 and 2009.



Note: The University of South Australia chose more than one group to target.

Source: DIISRTE Performance funding target summary table.

Figure 3.1: Under-represented target groups by Table A universities in 2012 and 2013

Most universities chose Indigenous students as their other under-represented group target in 2012 and 2013, and they were required to increase participation by 0.06% in 2012 and 0.17% in 2013. The target increases for students with disability were 0.15% in 2012 and 0.45% in 2013. For regional students in 2012 and 2013 the target increase was 0.16% in 2012 and 2013, and for regional and remote students combined, the target increases were 0.48% in 2012 and 0.49% in 2013. The increases required for students from a non-English speaking background were 0.08% in 2012 and 0.24% in 2013. The University of South Australia chose to target more than one group, and they are Indigenous students, regional and remote students, students from a NESB and students with disability. Its performance targets were a 0.27% increase in 2012 and a 0.80% increase in 2013.

Expected impacts of equity policies and programs

There is a well-established set of known barriers to university application and enrolment (Bradley et al. 2008; Behrendt 2012), and students from equity groups are more likely than others to face these barriers (Figure 3.2). Depending upon the particular barriers and on the equity groups in their target populations, universities can employ a range of different strategies to address these barriers. In general, these strategies are not designed to change the underlying structural determinants of the barriers (for example, families' socioeconomic status or the areas in which they live), but to address the effects of the barriers themselves.

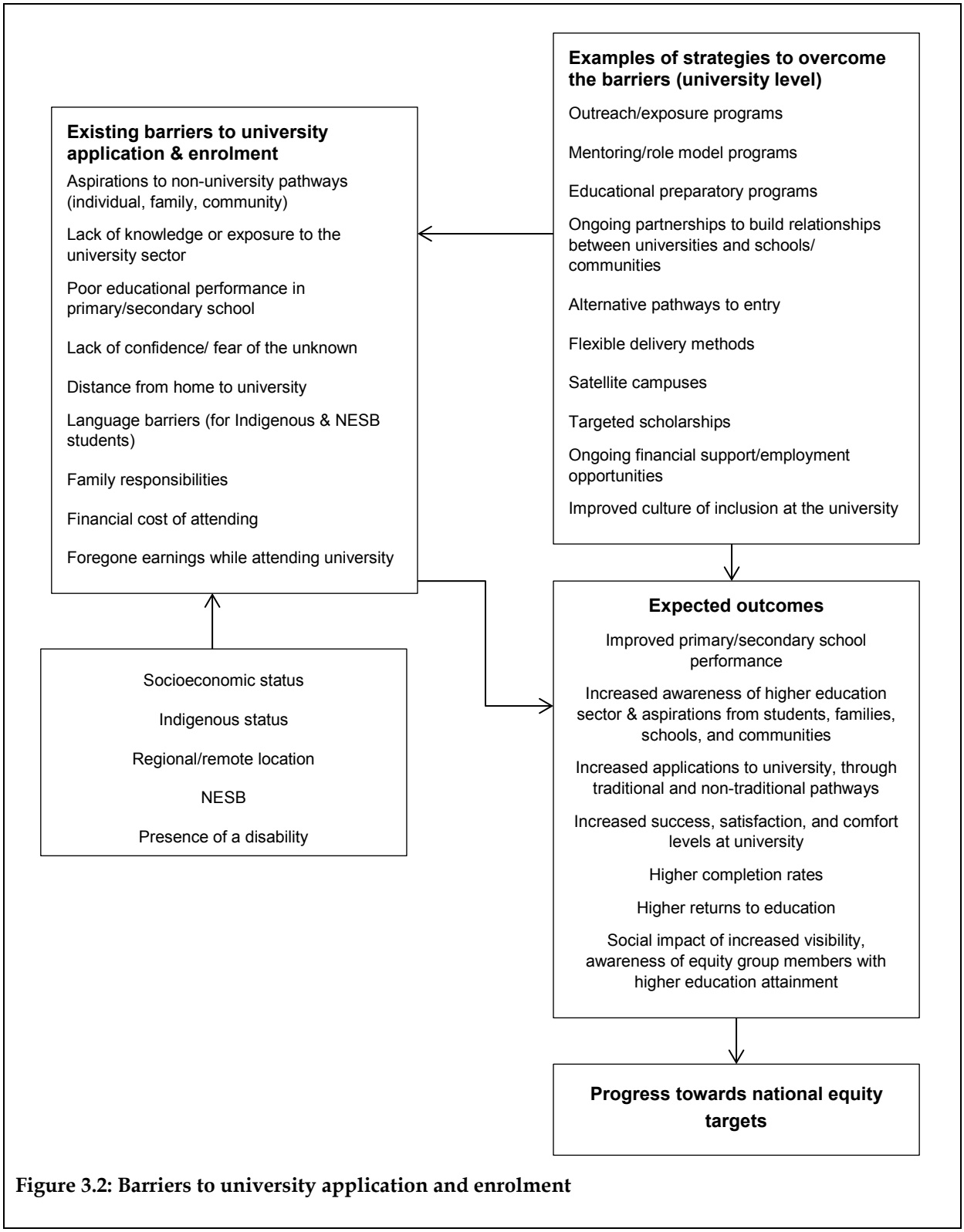


Figure 3.2: Barriers to university application and enrolment

Examples of university-based approaches to improving equity

Australian universities are currently using a wide range of strategies to improve equity in higher education among disadvantaged groups by increasing accessibility and providing support to university students from equity groups.

Improving access

Strategies to improve access to university include:

- engaging with schools and communities in areas with under-represented student groups (for example, regional/remote, Indigenous, low SES) to improve academic outcomes, increase awareness of and aspirations for university attendance, and provide students with the skills required to succeed at university
- overcoming financial issues through equity-based scholarships
- the addition of bonus points to students' Australian Tertiary Admissions Rank (ATAR) if they live in a regional or remote area, are of Aboriginal or Torres Strait Islander background or have studied at a school defined by the university as low SES
- provision of selective entry or alternative admission programs for particular equity groups
- offering flexible delivery modes, which can be beneficial for students with competing commitments and/or who live in a location remote from campus (CSHE 2010). Flexible delivery modes include allowing part-time study and off-campus learning.

Support services for students

Students in equity groups may be more likely to experience personal, financial social, academic and other difficulties while at university, which may account for their lower retention and success rates. Making university support services visible and accessible will particularly assist students who may not otherwise have strong personal support networks.

Examples of support services include:

- peer advisors; counsellors; student support services
- tutors; academic assistance
- financial aid; housing; childcare
- ensuring that curricula, teaching, learning and assessment support social inclusion goals
- providing career counselling and facilitating post-graduate options (for example, employment; graduate studies).

The types of incentives, outreach, and individual support offered by universities are presented in Appendix B.

4 Potential indicators for a measurement framework for equity in higher education

This chapter presents a set of potential indicators which could be incorporated into a measurement framework for equity in higher education. It first provides an overview of definitional and measurement issues related to equity groups, then discusses potential data sources which could be used to support an MFE. The chapter then reviews previous equity measurement frameworks to highlight key domains and potential indicators.

The final section of the chapter brings together all the elements to construct a potential MFE. First, the four key phases in the life cycle of undergraduate students were defined:

- the pre-entry phase (aspirations and enrolments)
- offers, acceptance, and enrolment
- experience during university
- graduate outcomes.

The key policy goals for each of the phases and processes expected to lead to those goals were then linked to each of these phases. A series of potential indicators was matched to the specific inputs, outputs, and outcomes for each phase along with suggested data sources. Indicators were also added which focused on the precursors of higher education attainment.

The final step was to reorganise the indicators into a three-tier model based on the structure of the National Aboriginal and Torres Strait Islander Health Performance Framework (NATSIHPF).

Definitional issues of equity groups

The accuracy of definitions for equity groups has come under criticism in the past two decades because of new understandings of the complexity of disadvantage (Ferrier 2006; Bradley et al. 2008). The assumption that the current equity groups are homogenous may overlook the diversity that exists within each group (Ferrier 2006). For example, not all Indigenous people are located in the same geographical area or have the same socioeconomic status or school opportunities.

In addition, belonging to one equity group may coincide with membership in other equity groups, and being a member of multiple equity groups has been found to compound barriers to participation—yet aggregate statistics permit the counting of single characteristics only. Other characteristics have also been identified as disadvantaging students, especially those who already belong to an equity group (Ferrier & Heagney 1999). These are:

- inadequate financial resources
- combining study and work
- family responsibilities
- students who are the first in their family to attend university

- students experiencing isolation in the university environment.

Low socioeconomic status

People from a low SES background are those who are disadvantaged through a lack of material and social resources relative to the wider population and, as such, have a diminished ability to participate in society (ABS 2008b). SES is dependent on many factors including, but not limited to, education, occupation, income, housing, family structure and access to resources (AIHW 2012). It can be conceptualised at the individual, family, household, or community level.

Socioeconomic status is notoriously difficult to measure. International standards for defining and measuring SES do not exist, and various methods have been trialled worldwide including occupation, education, geographic indicators, family income and wealth indicators, such as consumption (James et al. 2008).

In the past, higher education statistics defined low SES students by using postcode averages, and similar methods have been used in other countries. Post codes that fall in the bottom 25% of the SEIFA Index of Education and Occupation (IEO) are classified as low SES. The IEO is a ranking of geographic areas across Australia derived from Census variables relating to the educational and occupational characteristics of communities.

While this is a quick, non-intrusive and relatively inexpensive indicator, it can overestimate the level of representation of people from low SES backgrounds in higher education. This is because it assumes that the community living in a postal area is socially homogenous. However, if high SES people live in areas assigned low SES, they may skew the data for higher education participation (James et al. 2008).

In recent years low SES has also been reported using data at the smaller Census Collection District (CD) level in place of postcode. Theoretically, measurement using CDs should be more accurate than postcodes because they include a smaller number of households, but this again assumes that the community within a CD is socially and economically homogenous.

Because of these issues an interim measure was put in place for the purposes of calculating funding levels to universities and progress against the low SES target (DIICCSTRE 2013b):

$C = (2A + B)/3$

where

- C is the indicator of undergraduates from low SES backgrounds
- A is the total number of domestic undergraduates enrolled with a home address in the lowest quartile of the SEIFA IEO (CD level)
- B is the number of domestic undergraduates who meet relevant income support payment criteria in relation to the following payment types: Dependent Youth Allowance (fulltime students); ABSTUDY (Living Allowance); Austudy Pensioner Education Supplement; ABSTUDY Pensioner Education Supplement; and ABSTUDY Away from Base assistance (Commonwealth of Australia 2012).

According to a recent discussion paper by DIICCRSTE (2013b), the interim measure also had problems, because the higher education sector was unable to replicate the income support payments data at the level of individual universities or to use this measure to identify individual students from low SES backgrounds.

After considering other options for measuring SES such as using parental education data at the student level, or the SES status of the secondary schools attended by the students, DIICCRSTE 2013b recommended the retention of a sole geography-based indicator (the SEIFA IEO), but that it be calculated at the Statistical Area Level 1 (SA1) level rather than the previous CD or postcode level to align with the new Australian Statistical Geographical Standard (ASGS).

Indigenous status

Indigenous students are those who self-identify as being of Aboriginal and/or Torres Strait Islander origin. While the formally accepted definition is someone who is of Aboriginal or Torres Strait Islander descent, identifies as an Aboriginal and/or Torres Strait Islander person, and is accepted as such by the community in which he or she lives or has lived, for the purpose of most services and programs, self-identification is the key element.

Self-identification is an approach used internationally and is supported by most Indigenous organisations and representatives (ABS 2012b). However, not all Indigenous students may choose to identify themselves as such, which may mean that data collected by universities underestimate the number of Indigenous students enrolled.

Although the technical specifications for the Higher Education Student Data Collection set out reporting categories for Indigenous status, they do not specify how universities are to ask the question. In addition, the coding of categories is inconsistent with ABS standards (see Table 4.1).

Table 4.1: Comparison of standard ABS and Higher Education Student Data Collection Indigenous status coding categories

Standard ABS coding categories	Higher Education Student Data Collection coding categories
1. Aboriginal but not Torres Strait Islander origin	3. Of Aboriginal origin but not Torres Strait Islander
2. Torres Strait Islander but not Aboriginal origin	4. Of Torres Strait Islander origin but not Aboriginal
3. Both Aboriginal and Torres Strait Islander origin	5. Both Aboriginal and Torres Strait Islander origin
4. Neither Aboriginal nor Torres Strait Islander origin	2. Non-Indigenous—neither Aboriginal nor Torres Strait Islander origin
9. Not stated/inadequately described	9. No information

There are several key data quality issues with regard to Indigenous status:

- To what extent is data collected consistently across universities?
- How large is the potential under-identification of Indigenous students?
- What is the likely impact of the under-identification on enrolment and completion rates?

AIHW's 2009 data quality assessment of Aboriginal and Torres Strait Islander health labour force statistics included a chapter on higher education and training data. The report found that in several data sets, the number of records with Indigenous status recorded as 'not stated' was substantially higher than the number of records for Indigenous people. For example, in the HESC data collection, of all students who completed their higher education course in health in 2006, for 2.8% their Indigenous status was 'not stated'. In comparison, the proportion of Indigenous students was 1.0%. Non-response can be an issue for data quality when dealing with a small population such as the Indigenous population. Small shifts in the

numbers of not stated responses can have large effects on Indigenous numbers, proportions and rates (AIHW 2009).

More work on data quality issues with regard to Indigenous identification (similar to that done by the AIHW in the health and community services sector) will be required to improve data quality and ensure that the statistics are able to accurately measure progress against the targets. These issues are reflected in Recommendation 35 (point 2) of the Behrendt Report, which urges the Australian Government and universities to work together to:

> *…develop a set of standardised words to be used by universities, based on the national Census's Indigenous identification question, when asking whether a person identifies as Aboriginal or Torres Strait Islander.*

Students with disability

People with disability have a health impairment that can restrict their daily activities. The impairment can be physical or mental, and can be caused by genetic disorders, illnesses, accidents, ageing, or a combination of these factors (AIHW 2012).

The AIHW (2012) defines 'disability' as having at least one of 17 impairments, health conditions or limitations that has lasted, or was likely to last, for at least 6 months, and that restricted everyday activities.

Currently disability is measured through self-identification by students at enrolment that they have a disability, impairment or long-term medical condition which may affect their studies. Self-identification depends on students' awareness and expectations of their health, and their perception of how well they can perform activities of daily living. This may mean that not all students with disability will be captured in university data. Students may also choose not to identify as having a disability, which could also underestimate true figures.

According to the technical specifications for the Higher Education Student Data Collection, universities are to use the following questions regarding disability:

- Question 1: Do you have a disability, impairment or long-term medical condition which may affect your studies? (yes, no)
- Question 2 (if yes to question 1), please indicate the area/s of impairment:
  - Hearing
  - Learning
  - Mobility
  - Vision
  - Medical
  - Other
- Question 3 (if yes to question 1), would you like to receive advice on support services, equipment and facilities which may assist you? (yes, no)

However, an examination of enrolment forms from selected universities has found that the wording of these questions varies across institutions. The standard first question is usually 'Do you have a disability, impairment or long term medical condition which may affect your studies?' or similar.

There is greater variation in how the other two questions are presented. Students are asked what type of impairment or disability they have, and students may select from a range of tick-box options or specify 'other'. The department specifies the options of 'hearing', 'learning', 'mobility', 'vision' or 'medical', however some universities also specify other forms of disability such as intellectual or mental health.

The third question asks whether students would like assistance or information on the disability support services, equipment or facilities offered by the institution. Some universities ask students if they would like assistance or information against each disability option offered in question 2. Answering yes to this question does not automatically notify the university's disability support services and students are required to contact the service directly for assistance.

In its 2012 review of the Disability Standards for Education, DEEWR found that there was concern among education providers that the definition of disability varied between states, and that there was uncertainty about whether state or Commonwealth definitions of disability should apply in particular circumstances. Tertiary education providers also recommended that students be provided with more information about disability at enrolment, as some students were not aware that mental health conditions could be classified as a disability (DEEWR 2012).

Alternative measures could include:

- percentage of students receiving a Disability Support Pension
- percentage of students who report having one or more conditions from a specified list.

The ABS also has a Short Disability Module which includes more information on the type/severity of the disability and its potential impact on the need for educational support, which could be included on enrolment forms (ABS 2010a).

Students from regional or remote areas

People living in regional or remote areas are those who live in communities that have relatively small populations and reduced access to services due to their geographic location. Currently, students' geographic status is calculated on the basis of the postcode of their permanent home residence which is mapped to regional/remote categories using the MCEETYA classification. The MCEETYA codes are derived from the Australian Standard Geographical Classification (AGSC) with some adjustments to cater for the department's requirements.

The AGSC Remoteness Structure uses the Accessibility/Remoteness Index of Australia (ARIA) to determine remoteness, and the MCEETYA Geographical Location Classification model bases remoteness on population for some categories and ARIA for the categories of 'inner provincial', 'outer provincial' and 'remote' (see Table 4.2).

The geographical classifications for 'regional' and 'remote' equity groups underwent a review in 2000, which resulted in MCEETYA implementing its current scheme in 2007 (Bradley et al. 2008; DEEWR 2009). Although this approach is more appropriate than previous schemes, there are still some irregularities with the MCEETYA definitions. For example, a student from Cairns may identify as being from a regional area, but the MCEETYA model categorises Cairns as a major city, which defines the student as being from a metropolitan area (DEEWR 2009). In comparison, the AGSC categorises Cairns as 'outer regional Australia'.

The department considers students whose permanent home residence falls within MCEETYA's Provincial Zone (categories 3–6) as being from a regional area, and students whose permanent home residence falls within MCEETYA's Remote Zone (categories 7 and 8) as being from a remote area.

Students may move away from home to study so their postcode of home residence may not reflect where they are originally from, and although they are a quick and inexpensive measure, postcodes may not adequately capture the remoteness of an address. This is particularly true of large postcodes which may include both regional centres and remote areas. As long as universities maintain the original home address of the students as a separate constant variable, alternative measures can be created, including:

- remoteness of the secondary school attended by students
- using SA1s rather than postcodes.

Table 4.2: Comparison of ARIA values used in the ASGC Remoteness Structure and the MCEETYA Geographical Location Classification model

ASGC Remoteness Structure categories	ARIA values (CD level)	MCEETYA Schools Geographical Location Classification model categories	ARIA values (CD level)
1. *Major cities*	0 – 0.2	1. Mainland state capital city regions (Statistical Divisions)	–
		2. Major urban statistical districts (100,000 or more population)	–
2. *Inner regional*	> 0.2 and ≤ 2.4	3. Provincial city statistical districts and Darwin SD (50,000 or more population)	–
		4. Provincial city statistical districts (25,000 - 49,999 population)	–
		5. Inner provincial areas	≤ 2.4
3. *Outer regional*	> 2.4 and ≤ 5.92	6. Outer provincial areas	> 2.4 and ≤ 5.92
4. *Remote*	> 5.92 and ≤ 10.53	7. Remote areas	> 5.92 and ≤ 10.53
5. *Very remote*	> 10.53	8. Very remote areas	> 10.53

Source: ABS 2005. Australian Standard Geographical Classification (ASGC); Jones (2004).

Students from non-English speaking backgrounds

People from non-English speaking backgrounds are those who have migrated to Australia and whose first language is a language other than English. Their children can also be considered to be from a NESB. The department counts NESB students as domestic students who have lived in Australia for less than ten years and speak a language other than English at home.

This definition is limited because it:

- assumes that all people in this group have the same advantages or disadvantages
- defines diversity using language alone

- may miss disadvantaged migrants who speak English at home because it is widely spoken in their country of origin (for example, India, Pakistan, Hong Kong, Fiji, parts of Africa)
- may miss disadvantaged migrants who have lived in Australia longer than 10 years (and their children)

Alternative measures for this equity group could be:

- proficiency in spoken English
- main language spoken at home
- ancestry
- identification with an ethnic group

Implications

To ensure data quality for the definition and measurement of equity groups and to measure progress over time, it will be necessary to ensure that data are collected consistently across universities, not just reported consistently. An assessment of data quality with regard to the definition and identification of equity groups would also be helpful.

As stated in the introduction to this section, a number of students are likely to come from several equity groups (for example, low SES from a regional area). Because statistics are reported at the aggregate level, these students are counted individually in each equity group; however, there may be scope for creating multiple disadvantage categories—not just for counting purposes, but to identify whether outcomes differ for those with multiple disadvantages.

Potential data sources

In recent years there has been a major exercise in reviewing the data collections in the higher education sector with a strong emphasis on surveys. The Advancing Quality in Higher Education (AQHE) initiative ($1.1 billion) is focusing on developing performance measures for student experience and quality of learning outcomes in higher education and has included extensive consultation with higher education stakeholders (universities, business and students) in the quest to inform continuous improvement by universities and strengthen teaching and learning. The AQHE Reference Group was established to advise on the performance measurement instruments and the Australian Graduate Survey.

Recommendations accepted by the government included the implementation of:

- the 2013 University Experience Survey was the largest survey of current university students in Australia, with the results reported on the MyUniversity website
- a pilot Employer Satisfaction Survey which will provide an insight into the demand driven funding system responding to the labour market.

One of the requirements underpinning the development of possible indicators for the potential MFE is that it use existing data sources where possible, in order to minimise the already significant reporting burden on universities (PhillipsKPA 2012), to assure comparability across reporting frameworks and policies, and to reduce the overall cost of actually reporting against the indicators once they have been finalised.

A scoping exercise of existing data sources was undertaken relating to inputs, outputs, outcomes, and the targets themselves. Table 4.3 summarises the potentially relevant data sources and their scope, while a more detailed descriptive table of potential data sources is included as Appendix C.

A full range of potential data sources were included for consideration, regardless of their current public availability. The criterion for inclusion was whether relevant data were being collected, even if those data were not collected consistently across universities. Thus, the sources consist of both nationally standardised data sets and data that are currently collected (but may not be made publicly available) by individual universities. Some of the data are available free of charge, while accessing other data may incur a charge.

It is important to note that there are likely to be changes to some of these data collections beginning in 2014 as a result of the December 2013 *Government Response to the Review of Reporting Requirements for Universities* which will include separate equity reports from each university (Australian Government 2013).

Table 4.3: Potential data sources for the MFE

Source	Data type	Frequency	Years available	Scope
Internal university administration information systems	Administrative	Annual	Ongoing	
Institutional Performance Portfolios Information Collection (IPPIC)	Census of Table A and Table B providers	Annual	2009-2013	The IPPIC supplemented information collected for the IPP that assesses universities in seven areas: higher education provision; student experience; student outcomes; community, equity and access; research and research training; resources and infrastructure; staffing capabilities. Not publicly available. In December 2013, the Government Response to the *Review of Reporting Requirements for Universities* accepted the recommendation to cease the IPPIC.
Higher Education Student Data Collection	Administrative	Annual	Ongoing	The Higher Education Student Data Collection encompasses enrolments, equivalent full time student load (unit of study data) and completions, and is reported by all higher education providers approved by the *Higher Education Support Act 2003*, including Table A, B, C and some private providers.
Higher Education Staff Data Collection	Administrative	Annual	Ongoing	Table A providers collect data on Actual Casual, Full-time and Fractional Full Time, and Estimated Casual staff at higher education institutions.
University Applications and Offers Data Collection	Administrative	Annual	Ongoing	The data collection is composed of individual records of applications by domestic applicants during the start of year admissions process for Commonwealth supported places in higher education undergraduate award courses. Records of offers made by universities and acceptances of those offers by students are also included in the Collection.
Jurisdictional university admissions centres	Administrative	Annual	Varies by state/territory	Administrative data collected on people who apply to University courses through state/territory university admissions centres.
Longitudinal Survey of Australian Youth (LSAY)	Longitudinal survey	Annual data for 6 cohorts. Each cohort is studied for 10 years.	Studies began in 1995. Cohorts include 1995, 1998, 2003, 2006, 2009, 2013. Individuals are contacted once a year for 10 years.	Information collected as part of LSAY covers a wide range of school and post-school topics, including: student achievement, student aspirations, school retention, social background, attitudes to school, work experiences and what students are doing when they leave school. This includes vocational and higher education, employment, job seeking activity, and satisfaction with various aspects of their lives.

(*continued*)

Table 4.3 (continued): Potential data sources for the MFE

Source	Data type	Frequency	Years available	Scope
National Aboriginal and Torres Strait Islander Social Survey (NATSISS)	Survey	6-yearly	2002, 2008	The 2008 NATSISS provides information on a range of demographic, social, environmental and economic indicators, including: personal and household characteristics; geography; language and cultural activities; social networks and support; health and disability; education; employment; financial stress; income; transport; personal safety; and housing.
Australian Health Survey (AHS), formerly the National Health Survey (NHS)	Survey	3-yearly (approx.)	1995, 2001, 2004–2005, 2007–2008, 2011–2013	The survey was designed to obtain national benchmarks on a wide range of health issues, and to enable changes in health to be monitored over time. Information was collected about: • the health status of the population; • health-related aspects of lifestyle and other health risk factors; and • the use of health services and other actions people had recently taken for their health.
General Social Survey (GSS)	Survey	4-yearly	2002, 2006, 2010	The survey provides information on people's health, family relationships, social and community involvement, education, employment, income and financial stress, assets and liabilities, housing and mobility, crime and safety, transport, attendance at culture and leisure venues, and sports attendance and participation.
Australian Graduate Survey - Course Experience Questionnaire (AGS-CEQ)	Survey	Annual	Since 1972	Intended to probe key elements of the university learning process and, in doing so, obtain data on the quality of teaching and courses.
Australian Graduate Survey - Graduate Destination Survey (AGS-GDS)	Survey	Annual	Since 1972	Collects information about graduate employment outcomes and previous employment, continuing study and work-seeking status, work-seeking behaviour, past education and key respondent characteristics (e.g. recent qualifications, residency status, and so forth).
Graduate Pathways Survey (GPS)	Survey	One off	2008	Investigates graduates' employment outcomes five years after completion of a bachelor's degree. The 2008 Graduate Pathways Survey (GPS) is a new cross-institutional study of the destinations and transitions of Australian university graduates.

(*continued*)

Table 4.3 (continued): Potential data sources for the MFE

Source	Data type	Frequency	Years available	Scope
Australasian Survey of Student Engagement (AUSSE)	Survey	Annual	Since 2007	Data from the AUSSE provides information on the time and effort students devote to educationally purposeful activities and on students' perceptions of the quality of other aspects of their university experience.
Beyond graduation survey (BGS)	Survey	Annual	Since 2009	Resurveys respondents of the AGS, three and five years after graduation to collect careers information and satisfaction with their course.
Survey of Education and Work (SEW)	Survey	Annual	Since 1964	Transition from education to work and current labour force and demographic characteristics for the civilian population aged 15-64 years and persons aged 65–74 years who are in the labour force or marginally attached to the labour force.
Survey of Education and Training (SET)	Survey	4-yearly	1989, 1993, 1997, 2001, 2005, 2009 Data collection ceased.	The aim of the survey was to provide national benchmark information on a range of key indicators relating to educational attainment and participation in education and training activities for the population. Now discontinued.
Centrelink payments data—Austudy	Administrative	Ongoing; financial year reporting	Since July 1998	Australian resident, over 25, and studying full-time at an approved education institution.
Centrelink payments data—ABSTUDY (Aboriginal and Torres Strait Islander Study Assistance Scheme)	Administrative	Ongoing; financial year reporting	ABSTUDY available since 1969	Welfare payment for Indigenous Australians undergoing some form of study. All Indigenous students at secondary or tertiary institutions, as well as those studying by correspondence, and primary students who turned 14 prior to 1 January of their current year of study.
Centrelink payments data—Youth Allowance	Administrative	Ongoing; financial year reporting	Since July 1998	Youth Allowance is an income support payment available to full-time students and Australian Apprentices aged 16–24, and to job seekers and those undertaking a combination of other activities leading to employment aged 16–20.
Australian Early Development Index (AEDI)	Administrative	3-yearly	Since 2009	Measures development across domains of physical health and wellbeing; social competence; emotional maturity; language and cognitive skills; communication skills and general knowledge.
National Assessment Program (NAPLAN)	Administrative	Annual	Since 2008	Tests students' skills in years 3, 5, 7 and 9 on reading, writing, spelling and numeracy.

(*continued*)

Table 4.3 (continued): Potential data sources for the MFE

Source	Data type	Frequency	Years available	Scope
National Schools Attendance Collection (NSAC)	Administrative	Annual	Ongoing	The NSAC is collected across all states and territories for full-time students in Years 1 to 10.
ABS Census of Population and Housing	Census	5-yearly	Censuses were held in 1901, 1911, 1921, 1933, 1947 and 1954, and the 5-year period was introduced in 1961.	Its objective is to accurately measure the number and key characteristics of people who are in Australia on Census Night, and of the dwellings in which they live. This information provides a reliable basis for estimating the population of each of the states, territories and local government areas.

University-level data on equity processes and outcomes

Between 2011 and 2013, universities were required to collect information on, and report on, a number of equity-related processes and outcomes, including:

- outlining equity commitments in Section 3.2 of their mission-based compacts
- reporting on progress on Section 3.2 in Section 6 of the Institutional Performance Portfolio Information Collection (IPPIC) and for their Reward Funding
- reporting on student characteristics through the Higher Education Student Data Collection and staffing through the Higher Education Staff Data Collection.

The processes for data collection and reporting on equity-related policies and outcomes are currently under review.

The University Applications and Offers Data Collection provides information on applications, offers, and acceptances, and operates as a national minimum dataset. Additional information is held by each university (for example, on the types of pathways students used to enter the university). Below is a short summary of these key data sources.

Institutional Performance Portfolios Information Collection (IPPIC)

The Institutional Performance Portfolios were prepared annually by DIICCSRTE for each university based on information provided by the university on their student load planning, financial planning, community engagement, equity activities, research and research training. Universities were required to report on the activities they undertook using HEPPP funds and on their outcomes in an Equity Report that also outlines the equity groups the university chose to focus on, the equity programs run by the university and the equity scholarships offered. The university also had to include an Indigenous Education Statement that specifies the expenditure of their Indigenous Support Program grant.

Whether the reports are made public is at the discretion of the universities.

In December 2013, the Government Response to the *Review of reporting requirements for universities* accepted the recommendation to cease the IPPIC.

Higher Education Student Data Collections

The Higher Education Student Data Collection collects data from higher education institutions about students enrolled in their courses. The collection consists of seventeen files that are related to enrolment, student load, courses, campus locations, scholarships, Commonwealth supported places (CSP), and completions, among other topics. Collection of

the data is required under the *Higher Education Support Act 2003* and one of its purposes is to provide information for the government to determine the financial support it provides to higher education institutions and students.

A broad range of data are collected on students, such as age, gender, country of birth, citizenship, disability status, Indigenous status, home postcode, language spoken at home, tertiary entrance score, basis for admission, CSP information, scholarship details, student load, institution, course type, field of study, campus location, attendance mode, and completions.

Data are collected throughout the year and the frequency depends on the data element. For example, enrolment data are collected 4 times a year around the university census dates, whereas course completions are collected once a year. Data is published online by the Department and is used for the *MyUniversity* website. The Department website also publishes the data twice yearly as half-year and full-year data. The data is validated twice yearly.

In the *Development of performance measures report of the Advancing Quality in Higher Education Reference Group*, 2012, a key issue raised was the interrelationship between the University Experience Survey (UES) and the Course Experience Questionnaire (CEQ). To address this issue, the Reference Group proposed that the conceptual and empirical relationship between UES scales and CEQ scales are investigated further. This will afford a comparison between UES and CEQ results and provide an informed decision on the future of CEQ beyond the end of the transitional phase in 2014-15.

Higher Education Staff Data Collection

In 2012 an issues paper was released for the Higher Education Staff Data Collection Review with a purpose to determine how effectively the collection meets the needs of key stakeholders, and to consider whether any data currently reported may no longer be required.

The Higher Education Staff Data Collection collects data from higher education institutions about their staff. Collection of the data is required under the *Higher Education Support Act 2003* and the data is used by the government to determine the financial support it provides to higher education institutions.

The data elements collected include age, gender, appointment details, current duties and classification details, full-time equivalence details, salary details, function (teaching and/or research), organisational unit, highest qualification, country of birth, language spoken at home, and Indigenous status.

The data are collected once a year and are published on the Department and MyUniversity websites annually. Data was first collected in 1987. Institutions are given written instructions on what information is required along with software to assist with data collection. The software also includes a data validation process.

University Applications and Offers Data Collection

The department holds this national minimum dataset of university applications, offers and acceptances. University applications and offers data is only submitted by Table A and B higher education providers (providers) and tertiary admissions centres (TAC).

The data relate to domestic undergraduate student applications and provide information on university applications and the characteristics of applicants. The collection includes data on

university offers made, university offers accepted and the number of direct applications to universities. Data are also available on applications with preferences, offers and acceptances by state, field of education, applicants' prior educational participation, and demographic characteristics such as socioeconomic status, remoteness and Indigenous status.

Data are reported throughout the year, and the final report for each year is published at the end of the admissions process for the main intake at the start of the academic year. Data from TACs is available from 2008 and data on direct applications to higher education providers is available from 2010. The data is used to identify trends in applications, offers and deferrals among the wider population, and specific groups such as Indigenous and non-metropolitan students, and students from low SES backgrounds.

Data on aspirations, student experiences during university, and graduate outcomes

Aspirations

Data on the aspirations of high school students is available through the Longitudinal Survey of Australian Youth (LSAY). There is also some information available from the General Social Survey and the National Aboriginal and Torres Strait Islander Survey on educational plans and reasons why students did not study (although they may have wanted to).

Longitudinal Survey of Australian Youth (LSAY)

The Longitudinal Survey of Australian Youth (LSAY) is funded and managed by the Department with the National Centre for Vocational Education and Research (NCVER) collecting the data from young people as they move from school to further study, work or elsewhere. Survey participants enter the study when they are 15 years old (or in Year 9 in the earlier studies), and are surveyed once a year for 10 years. Studies commenced with a new cohort of over 10,000 participants every three years from 1995 to 2009. The next survey cohort after 2009 has yet to be determined.

A very broad range of topics are covered by the LSAY, which includes questions on social background, school achievement, school retention, school attitudes, aspirations, work experience and post-school destinations, such as vocational and higher education, employment, job-seeking activity, and life satisfaction.

The data are available by application for research purposes only (that is, not for commercial or financial gain). As survey attrition occurs over subsequent interviews, accuracy and reliability of the data may decrease.

The National Aboriginal and Torres Strait Islander Social Survey (NATSISS)

The 2008 NATSISS was conducted between August 2008 and April 2009. Information was collected by personal interview from approximately 13,300 Aboriginal and Torres Strait Islander people: 5,500 aged 0–14 years and 7,800 aged 15 years and over in both non-remote and remote parts of Australia. The NATSISS sample was specifically designed to select a representative sample of Aboriginal and Torres Strait Islander peoples. The NATSISS uses the standard Indigenous status question to identify Aboriginal and Torres Strait Islander households from which the sampling process is then undertaken. Information recorded in this survey is 'as reported' by respondents, or from child proxies (usually parents), on behalf of selected children aged 0–14 years. Data may differ from those which might be obtained from other sources or by using other collection methodologies. Responses may also be

affected by imperfect recall or individual interpretation of survey questions. Selected non-Indigenous comparisons are available from the 2007–08 National Health Survey and a range of other surveys. (Further details can be obtained from ABS cat. no. 4714.0 ABS 2009.) Time-series comparisons for some indicators are available from the 2002 NATSISS and the 1994 National Aboriginal and Torres Strait Islander Survey (NATSIS).

Student experiences during and post-university

The University Experience Survey (UES), developed throughout 2011, was designed to measure the experiences of first-year students and to provide more timely results than the current Course Experience Questionnaire (CEQ).

From 2013 the UES results are reported on the *MyUniversity* website. The 2012 survey received over 110,000 responses, making it the largest survey of current university students. This survey has some overlap/duplication with the Australian Graduate Survey - Course Experience Questionnaire (AGS-CEQ), with the conceptual and empirical relationship between UES scales and CEQ scales; however, the Advancing Quality in Higher Education (AQHE) Reference Group recommended that this be further investigated to enable a comparison between UES and CEQ results, with a view to informing a decision on the future of the CEQ in 2014-15.

Data on student experiences during university are available from the Australian Graduate Survey - Course Experience Questionnaire (AGS-CEQ), while post-graduation surveys include the Australian Graduate Survey - Graduate Destination Survey (AGS-GDS) and the one-off Graduate Pathways Survey (GPS) (ACER). AGS data can be disaggregated to the individual university level.

Australian Graduate Survey - Course Experience Questionnaire (AGS-CEQ)

The CEQ is one of three individual surveys that make up the AGS. The data are collected by individual universities and reported to Graduate Careers Australia (who oversee and manage the process).

The aim of the CEQ is to determine what graduates thought of the coursework program that they had recently completed, including their attitudes towards the skills they acquired, and the quality of teaching provided, during their program.

The CEQ consists of a series of statements, and graduates are asked whether they agree with each statement. The possible responses are 'strongly disagree', 'disagree', 'uncertain', 'agree', or 'strongly agree'. The statements are divided into several scales, which are groups of statements that have a similar theme (for example, good teaching; student support). There are three core scales that are used by all universities, namely the Generic Skills Scale, the Good Teaching Scale, and the Overall Satisfaction Item. The remaining scales are optional, and are only used by some universities.

Australian Graduate Survey - Graduate Destination Survey (AGS-GDS)

The Graduate Destination Survey (GDS) collects information about graduate employment outcomes and previous employment; continuing study and work-seeking status; work-seeking behaviour; past education; and key respondent characteristics (for example, recent qualifications, residency status, and so forth). The survey instrument is administered in an online, hard-copy and/or telephone mode. The survey is conducted in two rounds, around the reference dates of 31 October for graduates completing in the first half of the preceding year, and 30 April for graduates completing in the second half of the preceding

year. Collected as part of the Australian Graduate Survey, the AGS has been conducted annually since 1972.

Beyond Graduation Survey

The Beyond Graduation Survey (BGS) is conducted by Graduate Careers Australia as a follow-up to the Australian Graduate Survey (AGS). The BGS re-surveys respondents to the AGS three and five years after they completed their course to collect information on their career trajectories and satisfaction with their course. It monitors graduates' transition to work, study or other destination. The first BGS was conducted in 2009 and it surveyed graduates who completed the 2006 AGS. The survey is conducted yearly and is the first longitudinal study of Australian higher education graduates conducted on such a large scale.

Graduates who responded to the AGS are invited by email to complete the BGS online. The survey asks graduates about their employment and further study activities as at 30 April for the current year and the 2 previous years. Graduates are also asked to assess their course experience and employability skills, both immediately after course completion and at the time of the survey. Data on personal characteristics are also imputed from the AGS.

The BGS gives a broad indication of graduate outcomes and experiences in a particular year, however institutional participation and response rates must be taken into account. For example, in 2009 the number of higher education institutions participating was 23, and the national response rate was 19%.

Survey of Education and Work (SEW)

The SEW provides a range of key indicators of the educational participation and attainment of persons aged 15-74 years, along with data on people's transition between education and work. The annual time series allows for ongoing monitoring of people presently participating in education; level of highest non-school qualification; level of highest educational attainment; characteristics of people's transition between education and work; and data on apprentices. SEW is a supplement to the monthly Labour Force Survey (LFS). Respondents to the LFS who were in scope for the supplementary survey were asked further questions.

Information was mainly collected through interviews conducted over a two week period in May 2011. Interviews were conducted either face-to-face or over the telephone. Information was obtained from any responsible adult in the household who was asked to respond on behalf of all persons in the household in scope for the survey. All interviews were conducted using computer-assisted interviewing (CAI).

Surveys were conducted annually from February 1964 to February 1974; in May 1975 and 1976; in August 1977 and 1978; and annually in May since 1979. Since May 2002, the results of the survey have been published in the ABS' series *Education and work, Australia* (cat. no. 6227.0).

SEW is subject to both sampling and non-sampling error. Additionally, estimates from the SEW may differ from the estimates produced from other ABS collections.

Survey of Education and Training (SET)

The Survey of Education and Training (SET) was a 4-yearly household survey that provided a snapshot of participation, outcomes and access to education and training. The last SET was conducted between March and June in 2009, and personal interviews were sought from persons aged 15–74, who were usual residents of private dwellings. In total, 23,807 persons

fully responded to the 2009 SET, and their results were weighted to infer results for the total population aged 15–74.

ABS trained interviewers collected information for the SET using computer assisted interviewing (CAI), in which interviewers record respondents' responses to questions on an electronic notebook at the time of interview. Personal interviews were conducted with all persons aged 15-74, however, a single person in a household, aged 18 or over, provided basic household information including age, sex, Indigenous status, country of birth and relationships for all household members.

Interviewers asked most of the questionnaire of persons in the populations of interest: those who were aged 15-64 and persons aged 65-74 who were in, or marginally attached to, the labour force. Persons aged 65-74 who were in scope but not in the population of interest were sequenced to the end of the questionnaire once their labour force status was established.

The ABS conducted the 2009 SET in both urban and rural areas, in all states and territories, but excluded persons living in very remote parts of Australia.

The same methodology to collect the information was used in each survey. However, the scope of the surveys differs across the years, so any comparisons should bear this in mind.

Financial support

Centrelink administrative data—Austudy, ABSTUDY (Aboriginal and Torres Strait Islander Study Assistance Scheme) and Youth Allowance

Centrelink administrative data can provide information on the number and characteristics of students receiving means-tested income support payments. The types of payments relevant to higher education include Youth Allowance, Austudy, ABSTUDY, the Pensioner Education Supplement and Away from Base Assistance.

Data elements that may be sourced from this collection include age, gender, marital status, Indigenous status, personal income, parental income and parental occupation. Ongoing data is available, but it may be difficult to access. Data on recipients of the current Austudy and Youth Allowance have been collected since 1998, and of ABSTUDY from 1969.

Data on determinants/background characteristics

Australian Early Development Index (AEDI)

The Australian Early Development Index (AEDI) is an Australia-wide population measure of children's development at the time they enter school. The AEDI was first collected in 2009, and the Department plans to repeat the AEDI every 3 years. Results from the most recent AEDI (2012) were released in April 2013.

The AEDI measures development across 5 domains:

- physical health and wellbeing
- social competence
- emotional maturity
- language and cognitive skills (school-based)
- communication skills and general knowledge.

To obtain these measures, teachers complete AEDI checklists for children in their first year of formal full-time school. To facilitate this, the Social Research Centre in Melbourne developed a secure web-based data-entry system. Teachers complete the checklists based on their knowledge and observation of the children in their classes, along with demographic information from school enrolment forms.

In 2012, teachers completed over 289,000 checklists for children across Australian, which equates to 96.5% of the children enrolled in their first year of formal full-time school (government, Catholic or independent). Results for the AEDI are generally reported for the community where the children live, not where they go to school. The aim is to provide communities with a basis for reviewing the services, supports and environments that influence children in their first 5 years of life.

National Assessment Program – Literacy and Numeracy (NAPLAN)

The National Assessment Program – Literacy and Numeracy (NAPLAN) tests students' skills in reading, writing, spelling and numeracy. The NAPLAN tests are held nationwide in May each year for students in Years 3, 5, 7 and 9. A national analysis report of NAPLAN results is released by ACARA each year. The report publishes results by gender; Indigenous status; language background other than English status; parental occupation; parental education; and geographic location at each year level and testing area. The first NAPLAN tests were conducted in 2008 and replaced a variety of tests administered by the states and territories.

Comparing performance across years should be done with caution as minor fluctuations in test results may not indicate a significant change in the level of student achievement. Also, the nature of the writing test changed from narrative to persuasive writing in 2011, and therefore results before and after 2011 cannot be directly compared for this testing area.

National Schools Statistics Collection

The National Schools Statistics Collection (NSSC) is a joint undertaking of jurisdictional departments of education, the Australian Government Department of Education, the ABS, and the Standing Council for School Education and Early Childhood (SCSEEC). It was first conducted in a nationally comparable form in 1981. The NSSC data consists of three collections: finance; non-finance; and annual and special reporting. The non-finance data collection provides information on the number and characteristics of Australian primary, secondary and special school students, and is coordinated by the ABS.

The data are derived yearly from the annual Schools Census conducted in August each year. The data collected for students includes age, sex, jurisdiction, Indigenous status, year level and school sector. From these data, statistics on participation, continuation, progression and retention rates are derived.

Due to the small populations in some jurisdictions, or some disaggregation within jurisdictions (such as Indigenous students), relatively small changes in numbers can suggest large changes in rates and ratios, which may be misleading.

ACARA National Report on Schooling in Australia

The Australian Curriculum, Assessment and Reporting Authority (ACARA) National Report on Schooling in Australia collects data on school attendance and reports the data by sex, year level, jurisdiction, and school sector. It also collects data on student achievement (NAPLAN); Year 12 completion rates; and transition to work or further education. The report has been

prepared yearly since 1989, and, prior to 2009, these data were collected by the MCEEDYA National Schools Attendance Collection (NSAC).

The National Report on Schooling is compiled using data provided by state and Australian Government education agencies; the National Schools Statistics Collections coordinated by the ABS; the National Centre for Vocational Education Research; ABS social surveys; and from work commissioned or conducted by ACARA.

School attendance data is collected annually across all states and territories for full-time students in Years 1 to 10. Currently, data is not collected uniformly across jurisdictions and schooling sectors, therefore data is not nationally comparable. This will change in 2014, when nationally comparable student attendance data that complies with the National Standards for Student Attendance Data Reporting will be collected. At a minimum, attendance data will be able to be disaggregated by school location, school sector, sex, year level and Indigenous status.

Data to measure the population based targets

Five-yearly data from the Census of Population and Housing can be used to measure progress against the population target of 40% of 25–34 year olds to have attained at least a bachelor-level qualification by 2025. Yearly data is also available from the SEW and 4-yearly data from the SET (until 2009). Previously the SEW was used to determine progress towards the 40% target. The SEW data is adjusted when the census data is available.

ABS Census of Population and Housing

There are four principal sources of error in census data: respondent error, processing error, partial response and undercount. Quality management of the census program aims to reduce error as much as possible, and to provide a measure of the remaining error to data users, to allow them to use the data in an informed way.

The census form may be completed by one household member on behalf of others. Incorrect answers can be introduced to the census form if the respondent does not understand the question or does not know the correct information about other household members. Many of these errors remain in the final data. In the 2011 Census, each individual in a household was entitled to their own census number.

The processing of information from census forms is now mostly automated. Quality assurance procedures are used during census processing to ensure processing errors are minimised. Sample checking is undertaken during coding operations, and corrections are made where necessary.

When completing their census form, some people do not answer all the questions which apply to them. In these instances, a 'not stated' code is allocated during processing, with the exception of non-response to age, sex, marital status and place of usual residence. These variables are needed for population estimates, so they are imputed using other information on the Census form, as well as information from the previous Census.

Other census data issues relate to the accuracy of the census count itself, e.g., whether people are counted more than once, or not at all.

Following each census, assumptions are made about past levels of mortality to produce back cast population estimates.

Equity measurement frameworks/key reports

There are a number of national and international frameworks, reports, national agreements, reporting tools and instruments (hereafter referred to as 'frameworks/key reports') that have been developed to assess equity in higher education. A review of existing frameworks/key reports relevant to equity in higher education was undertaken, and involved finding and reviewing relevant Australian and international frameworks/key reports, and then mapping the domains and specific indicators used in the frameworks.

The process for assessing the frameworks/key reports, and to map the domains and indicator areas they cover, was modelled on AIHW's 2011 *National outcome measures for early childhood development: development of an indicator-based reporting framework*.

Search process

Several frameworks/key reports relevant to the development of a measurement framework for equity in access to higher education were found within that report. Other relevant frameworks/key reports were found primarily through Google searches, and through websites including the Standing Council for Federal Financial Relations, DIISRTE, and Charles Darwin University. Table 4.4 shows the sources where frameworks/key reports were found, the search terms used, and the frameworks/key reports that these searches produced. These frameworks/key reports included in the table are those that were deemed relevant to equity in access to higher education.

Table 4.4: Search for frameworks/key reports

Source	Keywords	Relevant frameworks/key reports found
Google	Institution assessment framework portfolio, university	• *Institutional assessment framework* (Swinburne University) • *Institutional assessment framework equity update* (Charles Darwin University)
	Institution performance framework portfolio, university	• *Institution performance portfolio* (UWA) • *Institutional performance portfolio information collection: instructions*
	Equity, access, university, measurement framework	• National plan for equity of access to higher education 2008–2013 (Ireland)
	Higher education, equity, access, framework	• *Framework for evaluation of equity initiatives* (Group of 8) • *Accountability framework for california colleges and universities* (USA) • *Macquarie@50*
	HEPPP equity framework, measure, report	• *Widening participation in higher education for people from low SES backgrounds* (Deakin University) • *Key measures for HEPPP planning and evaluation* (Monash University)
	Review, Australian higher education	• *Review of Australian higher education* (DEEWR)
	Participation, equity, higher education, low SES	• *Review of participation in higher education of people from low socioeconomic backgrounds and Indigenous people* (Universities Australia)

(Continued)

Table 4.4 (continued): Search for frameworks/key reports

Source	Keywords	Relevant frameworks/key reports found
Google	National higher education equity framework	• *Advancing the national higher education equity framework*
Standing Council on Federal Financial Relations website	National agreements	• National Agreement for Skills and Workforce Development
National outcome measures for early childhood development: development of an indicator-based reporting framework	n/a (list of frameworks provided in report)	• *Overcoming Indigenous Disadvantage* • National Indigenous Reform Agreement • National Education Agreement • National Partnership Agreement on Low Socio-Economic Status School Communities • *Aboriginal and Torres Strait Islander Health Performance Framework*
DIISRTE website	Measurement framework, higher education	• *Development of performance measurement instruments in higher education*
DIISRTE website	Performance funding	• *DEEWR performance funding: administrative and technical guidelines*
Charles Darwin University website	Equity, participation, framework	• *Our universities: backing Australia's future*

Excluded frameworks/key reports

A few frameworks/key reports were found but excluded because they were not directly related to higher education, or did not cover equity in higher education. Examples of such frameworks/key reports include:

- *Australian Research Alliance for Children and Youth report card: the wellbeing of young Australians*
- Charles Darwin University:
  - self-assessment portfolio
  - Indigenous community engagement.
- Regulatory Risk Framework (Tertiary Education Quality and Standards Agency)
- National Partnership Agreement on Early Childhood Education.

Included frameworks/key reports

The review identified 22 national and international frameworks, reports and reviews. These frameworks/key reports varied in scope and purpose: some were specific to equity in higher education, whereas others contained elements relating to it.

Sixteen of these frameworks/key reports focused solely on the higher education sector and the remaining 6 primarily focused on school students, the Indigenous population or the working age population. Some of these frameworks/key reports were not actual reporting frameworks, but performance reviews or policy agreements relating to equity in higher education. Additionally, although the Aboriginal and Torres Strait Islander Health Performance Framework (HPF) is not directly related to higher education, the structure of the framework was included as it serves as an example of how performance measures can potentially be organised for a measurement framework on equity in access to higher education.

The frameworks/key reports used different approaches: 6 were purely conceptual, 13 were measurement frameworks and 3 used a mixed approach. Four of the measurement frameworks/key reports identified specific performance targets, whereas the others listed the measures that either universities or governments should use to determine performance. The frameworks/key reports were grouped into the following categories, and are summarised below.

- COAG national agreements
  - National Education Agreement
  - National Agreement for Skills and Workforce Development
  - National Partnership Agreement on Low Socio-Economic Status School Communities
  - National Indigenous Reform Agreement
- Government frameworks and reports
  - *Overcoming Indigenous Disadvantage*
  - *Review of Australian higher education* (DEEWR)
  - *DEEWR performance funding: administrative and technical guidelines*
  - *Development of performance measurement instruments in higher education*
  - *Our universities: backing Australia's future*
  - *Advancing the National Higher Education Equity Framework*
  - *Aboriginal and Torres Strait Islander Health Performance Framework*
- University frameworks/reports
  - *Institutional Performance Portfolio information collection: instructions*
  - *Framework for Evaluation of Equity Initiatives* (Group of 8)
  - *Widening Participation in Higher Education for People from Low SES Backgrounds* (Deakin University)
  - *Key measures for HEPPP planning and evaluation* (Monash University)
  - *Macquarie@50*
  - *Review of participation in higher education of people from low socioeconomic backgrounds and Indigenous people* (Universities Australia)
  - *Indigenous Cultural Competency Framework* (Universities Australia)
  - *Institutional Assessment Framework* (Swinburne University)
  - *Institution Performance Portfolio* (UWA)
  - *Institutional Assessment Framework equity update* (Charles Darwin University)
- International frameworks
  - National Plan for Equity of Access to Higher Education 2008-2013 (Ireland)
  - *Accountability Framework for California Colleges and Universities* (USA)

Following is a brief overview of each of the frameworks/key reports.

COAG national agreements

National Education Agreement

The National Education Agreement (NEA), which came into effect on 1 January 2009, encompasses COAG's objectives for Australia's school system (COAG 2009a). COAG recognises that ensuring all young people have the best possible start in life is vital to the well-being of families, communities and the nation as a whole and, therefore, the NEA articulates the commitment of all Australian governments to ensure that all Australian school students acquire the knowledge and skills to participate effectively in society and employment in a globalised economy.

The NEA specifies 5 outcomes, focused on primary and secondary schooling, as well as the transition from school to work and further study. With regard factors related to higher education, the NEA has includes performance indicators on the proportion of:

- 15–19 year olds in full-time education or training, in full-time work, or both in part-time work and part-time education or training
- 20–24 year olds in full-time education or training, in full-time work, or both in part-time work and part-time education or training
- 15–19 year olds, who have left school, and are fully engaged in education, training or employment, by highest level of schooling
- 18–24 year olds engaged in full-time employment, education or training at or above AQF Certificate III
- the 20–24 year old population having attained at least Year 12 or equivalent or AQF Certificate II or above
- the 20–24 year old population having attained at least Year 12 or equivalent or AQF Certificate III or above
- 25–29 year olds who have gained a post-secondary qualification at AQF Certificate III or above.

National Agreement for Skills and Workforce Development

COAG's National Agreement for Skills and Workforce Development came into effect on 1 January 2009. It sets out the commitment between the Australian Government and the states and territories to work towards increasing the skill levels of all Australians, including Indigenous Australians.

The objective of this national agreement is a VET system that delivers a productive and highly skilled workforce; enables all working-age Australians to develop the skills and qualifications needed to participate effectively in the labour market and to contribute to Australia's economic future; and supports the achievement of increased rates of workforce participation (COAG 2009b).

COAG agreed that, through this national agreement, it would monitor progress towards achieving the following outcomes:

- gaps in foundation skill levels in the working age population are reduced, to enable effective educational, labour market and social participation
- the working age population has the depth and breadth of skills and capabilities required for the 21st century labour market

- the supply of skills provided by the national training system responds to meet changing labour market demand
- skills are used effectively to increase labour market efficiency, productivity, innovation and to ensure increased utilisation of human capital.

For these outcomes, the corresponding performance indicators are the proportion of:

- the working-age population with higher-level qualifications (Certificate III and above)
- employers satisfied that training meets their needs
- the working-age population with adequate foundation skills (literacy level 3 or above)
- the working-age population with or working towards a non-school AQF qualification
- VET graduates with improved employment status after training
- VET graduates with improved education/training status after training.

Although this national agreement is focused on vocational education training, it is similar to a framework for equity in access to higher education, as there are common factors that influence a person's ability to undertake either VET or university courses. Frameworks for both VET and university education also need to measure the employment opportunities and outcomes that follow from post-school training.

National Partnership Agreement on Low Socio-Economic Status School Communities

COAG developed the National Partnership (NP) Agreement on Low Socio-Economic Status School Communities as part of its National Education Agreement, established to support the high-quality schooling of all Australian children to improve the nation's participation and productivity. The Agreement acknowledges that low-SES school communities need to be targeted to ensure improvement in educational attainment among all Australian school students (COAG 2009c).

Although this NP does not relate directly to higher education, it identifies areas that are precursors to equity at the university level. The performance indicators of this NP that relate to low-SES students include school enrolment and attendance rates; literacy and numeracy skills; and Year 12 attainment. The NP also briefly considers other disadvantaged groups, including Indigenous students; students with disability; students with other additional learning needs; NESB students; refugees; and homeless students.

This framework outlines objectives for education system reform, the plans to achieve them, and the desired outputs. These outputs include improving the quality of teachers and principals; encouraging innovation and flexibility within schools; providing innovative and tailored learning opportunities; improving school accountability; and encouraging school partnerships with parents, other schools, businesses and communities. Each state and territory participating in the reforms will receive Australian Government funding and will be required to report against agreed reform milestones and timelines. Participating low-SES schools will also be required to evaluate the success of the reforms. However, actual milestones and evaluation measures are not specified in the NP.

National Indigenous Reform Agreement (NIRA)

The NIRA frames the task of 'closing the gap' in Indigenous disadvantage. It sets out the objectives, outcomes, outputs, performance indicators and performance benchmarks agreed by COAG. It also provides links to those national agreements and national partnership agreements across COAG which include elements aimed at achieving the goals of COAG's Closing the Gap in Indigenous Disadvantage framework (COAG 2009d).

There are 6 Closing the Gap targets which pertain to health, development, education and employment outcomes for Indigenous Australians. Although the targets do not relate directly to higher education, the NIRA includes targets that relate to factors that influence access to' and outcomes following' higher education attendance. For example, one target is to halve the gap for Indigenous students' Year 12 attainment or equivalent attainment rates by 2020. The indicator to measure this target is the proportion of 20-24 year-olds having attained at least a Year 12 or equivalent AQF Certificate II level (or above). The data source used for this is the ABS Census of Population and Housing.

Another target in the NIRA is to halve the gap in employment outcomes between Indigenous and non-Indigenous Australians within a decade. To monitor this, performance indicators include the proportion of Indigenous 20-64 year olds with, or working towards, a post-school qualification at Certificate level III or above, and a number of indicators on labour force participation and unemployment rates.

Government frameworks and key reports

Overcoming Indigenous Disadvantage

The *Overcoming Indigenous Disadvantage* (OID) key indicators reports serve as a public account of progress against the six targets set by COAG in the NIRA. The COAG targets for closing the gap in Indigenous disadvantage cover a number of domains, and pertain to life expectancy; young child mortality; early childhood education; reading, writing and numeracy; Year 12 attainment; and employment. For these targets, there are performance indicators relevant to higher education. For example:

- Year 12 attainment —the proportion of 20–24 year olds who have completed Year 12 or certificate level II or above
- post-secondary education, participation and attainment —the proportion of 20–64 year olds with a post school qualification of Certificate III or above or currently studying.
- outcomes from education—labour force status by educational attainment.

However, note that although the OID framework is aligned to the NIRA (and, consequently, the data in the two reports overlap), the NIRA is specifically focused on progress against the targets in the agreement, and comparisons of outcomes by State and Territory. In contrast, the OID report has a broader focus, and includes more indicators than the NIRA. The OID report also includes available time series data that predate the NIRA baseline of 2008, and, where jurisdictional data are not available, reports available information on outcomes at the national level (SCRGSP 2011).

Review of Australian higher education

The *Review of Australian higher education* (Bradley et al. 2008) was established to address the question of whether this critical sector of education is structured, organised and financed to position Australia to compete effectively in the new globalised economy. The review panel concluded that, while the system has great strengths, it faces significant, emerging threats which require decisive action. To address these, major reforms were recommended to the financing and regulatory frameworks for higher education. Specific targets and outcomes for equity groups—which included low SES, regional and remote students, and Indigenous students—were recommended in the Review. For most of these equity groups, the targets were aimed at achieving rates of access, completion, success and retention that were comparable, if not the same, as comparator groups (for example, the same rates for regional

students as for metropolitan students, and similar rates for Indigenous students as for non-Indigenous students).

Australian Government performance funding: administrative and technical guidelines

These guidelines specify how performance is currently being measured by the Australian Government for determining reward funding to Table A universities. The performance funding guidelines (DEEWR Higher Education Group 2011a, 2011b) are a performance measurement framework that stipulates excellence and improvement targets in relation to university participation and social inclusion for people from low SES backgrounds and other under-represented groups. The funding is paid under Part 2-3 of the *Higher Education Support Act 2003* and is based on the achievement of quantitative performance targets. Excellence targets are only specified for the low-SES indicator and are particular to each state, to reflect the proportion of people from low-SES backgrounds within the university's catchment area.

The targets include the proportion of domestic undergraduates from low-SES backgrounds and the proportion of domestic undergraduates from other under-represented groups, which may be students from regional or remote areas, Indigenous students, students with disability or NESB students. The university may also nominate one or more other under-represented groups, as long as data are available from the Higher Education Student Data Collection. Centrelink payments data are also used to measure SES using the interim low SES measure.

Development of Performance Measurement Instruments in Higher Education

Although not directly related to equity, this framework—prepared as a discussion paper by DEEWR (2011)—proposes instruments that could be used to measure the performance of universities in 3 areas: participation and social inclusion; student experience and the quality of learning; and teaching outcomes. The framework divides the measures into 3 stages of a student's life cycle:

- pre-entry, which considers application, admissions and enrolment
- university (undergraduate) study, which is divided into first year, middle years and final year
- post-study, which is divided into completion and graduation (1 year out) and more than 1 year out.

Instruments that are commonly used are outlined, along with proposed new instruments that the government is developing. Current instruments include:

- the Australasian Survey of Student Engagement
- the First Year Experience Questionnaire
- retention, progress and completion rates from the Higher Education Student Statistics Collection
- the International Student Barometer
- institution course evaluations
- the Australian Graduate Survey
- the Beyond Graduation survey.

Three instruments that were planned to be developed or reviewed are:

- the University Experience Survey
- an Australian version of the Collegiate Learning Assessment

- a review of the existing Australian Graduate Survey.

The framework acknowledges that while there are instruments to measure the second and third stages of the student life cycle, instruments to measure the pre-entry phase are yet to be developed.

Our universities: backing Australia's future

Our universities: backing Australia's future was the Australian Government's 2003 policy paper on improving higher education (Nelson 2003). One section of the paper considers equity and measures to increase access and participation of under-represented groups, which were identified as Indigenous Australians, people from a NESB, people with disabilities, people from rural and isolated areas, women in non-traditional areas of study, and people from low SES backgrounds. The policy reforms included increased funding for student scholarships and support services; scholarships for Indigenous university staff; and the establishment of the Indigenous Higher Education Advisory Council to advise the government on Indigenous higher education issues. While it mentions the need for performance measurement, it does not specify performance measures or reporting requirements.

Advancing the National Higher Education Equity Framework

This 1996 report reviews Australia's National Higher Education Equity Framework and offers recommendations for improving equity in the higher education sector in the subsequent 5 years (National Board of Employment, Education and Training 1996). The National Higher Education Equity Framework was developed in response to the 1989 government report *A fair chance for all: higher education that's within everyone's reach* (DEET 1989) that outlined a planning and action framework to achieve the government's commitment to achieving greater equity. While the 1996 report found some improvements in university participation and outcomes, there were still groups with distinct under-representation, namely people from low SES backgrounds and those from rural or isolated areas.

The report identified areas that needed to be addressed to further improve equity and presented recommendations and a strategic plan for the next 5 years that particularly focused on people from low SES backgrounds and from rural or isolated areas. Even so, it recognised that equity planning and management should continue to use the 6 under-represented groups nominated in *A fair chance for all*. These groups were Indigenous peoples; women in non-traditional areas (including research); people with a non-English speaking background; rural and isolated people; people with disabilities; and people from low socioeconomic backgrounds. This framework looks beyond access as a measure of equity performance and focuses on changing the culture of universities, and of the higher education sector as a whole, to improve equity.

Aboriginal and Torres Strait Islander Health Performance Framework

The Aboriginal and Torres Strait Islander Health Performance Framework (HPF) was designed to measure the impact of the National Strategic Framework for Aboriginal and Torres Strait Islander Health (NSFATSIH), and was an important tool for developing the new National Aboriginal and Torres Strait Islander Health Plan. Four reports on progress against the HPF have been published biennially since 2006. Although the HPF is not directly related to higher education, the structure of the framework serves as an example of how performance measures can potentially be organised into a measurement framework on equity of access to higher education.

The HPF is organised into 3 tiers to monitor progress in Aboriginal and Torres Strait Islander health status and outcomes, determinants of health, and health system performance. In each tier, there is a range of performance measures and indicators:

- Tier 1—Health status and outcomes: prevalence or disease or injury, human function, life expectancy, and well being
- Tier 2—Determinants of health status: determinants of health including SES, environmental factors, and health behaviours
- Tier 3—Health systems performance: the performance (for example, the effectiveness, responsiveness, accessibility, continuity, capability and sustainability) of health portfolio activities including population health programs, primary health care services and acute care sectors.

Although the HPF includes a wide range of indicators aimed at monitoring processes and outcomes in the health sector, Tier 2 (the determinants of health) includes a socioeconomic status domain which includes 3 performance measures relevant to education:

- literacy and numeracy (measured by NAPLAN performance in Years 3, 5, 7, and 9)
- education outcomes for young people (measured by Years 10 and 12 retention and attainment)
- educational participation and attainment of adults (measured by highest level of school completed; completions in VET sector; and level of educational institution currently attended).

University frameworks/key reports

Institutional Performance Portfolio information collection: Instructions

The instructions provided by DIISRTE to universities for preparing their annual Institutional Performance Portfolios include an equity reporting framework that outlines universities' progress in achieving their equity commitments (DIISRTE 2012c). The indicators that the department requires universities to report on include the equity groups that they target; any equity and outreach programs they implement; the equity scholarships they offer; and any other activities they implement to overcome educational disadvantage among under-represented groups.

Indigenous Education Statement (IES)

To be eligible to receive Indigenous Support Program grants, universities need to demonstrate that they have:

- implemented strategies for improving access, participation, retention and success of Indigenous Australian students
- increased participation of Indigenous people in its decision-making processes
- an Indigenous employment strategy.

This information is provided in their Indigenous Education Statement (IES).

Framework for Evaluation of Equity Initiatives **(Group of 8)**

In 2010, the Centre for the Study of Higher Education (CSHE) developed a Framework for Evaluation of Equity Initiatives for the Go8 universities to evaluate the effectiveness of their equity initiatives and interventions in the context of Australian Government policies and the distinctive missions and responsibilities of the individual Go8 institutions. This framework

focuses on three broad areas: access and participation; attainment and achievement; and graduate outcomes. The key indicators for each area are listed in Table 4.4.

The framework considers a range of equity groups, including people from low SES backgrounds; Indigenous people; people from rural and regional Australia; people from cultural minorities; people from various non-English speaking backgrounds; people with disabilities including those with mental health issues; and the gender variations in particular fields of study and occupations. The Go8 notes that the nature of educational disadvantage differs across these groups and not all people who are members of these groups experience educational disadvantage.

Within the framework, equity initiatives are structured into 3 conceptually distinct areas:

- access and participation
- attainment and achievement
- graduate outcomes.

The framework also recognises a fourth dimension, the important role the Go8 plays into research and knowledge transfer on equity and social inclusion.

In each of these areas, objectives and key indicators are proposed to measure progress in improving equity in the short term, as well as graduate outcomes following higher education in the long term (Table 4.5).

Table 4.5: Key indicators of the overall equity performance of Go8 universities, developed by CSHE

Area	Key indicators
Access and participation	• Proportion of enrolments for equity groups, with particular emphasis on low SES and Indigenous students in: o bachelor's degree courses o courses leading to entry to the professions o honours and graduate level courses o research higher degrees. • Proportion of school leavers admitted rates to higher education from schools with low transition. • Proportion of enrolments from non-school leavers from under-represented groups. • Gender ratio among domestic students enrolled in: o bachelor's degrees by field of study, including engineering, information technology, physical sciences, veterinary science, health sciences and education o graduate coursework programs o research higher degrees by field of study. • In bachelor's degrees, and where financial assistance was awarded on the basis of financial need, the: o number and proportion of domestic students receiving financial assistance o total sum on a per capita basis awarded to domestic students. • In non-HECS liable courses, and where financial assistance was awarded on the basis of financial need, the: o number and proportion of domestic students awarded fee-remission of at least 50% of course fees o number and proportion of domestic students awarded a living allowance or stipend o number and proportion of students provided with subsidised housing o total sum on a per capita basis awarded to domestic students. • Proportion of students admitted to first year undergraduate courses on criteria other than, or in addition to, ATAR. • Proportion of students admitted to graduate programs from under-represented groups. • Proportion of students admitted to graduate programs from non-traditional pathways.
Attainment and achievement	• Rates of retention, progression and completion for students in designated equity groups compared with other students, with particular attention to first year students • Rates of retention, progression and completion for students according to the criteria on which they were admitted • Grade distributions for students in designated equity groups compared with other students • Demographic characteristics of students identified as being at risk • Engagement, integration and satisfaction of undergraduate and postgraduate students (as measured by student experience surveys) by student background and criteria for admission to course, and with particular attention to first year students • Demographic characteristics of students participating in study abroad, industry placements and related programs.
Graduate outcomes	• Graduate outcomes data, including employment type, rate and salary by student background and criteria for admission to course • Proportion of students from designated equity groups enrolled in graduate programs, overall and by program type, including research higher degrees.

Source: CSHE 2010. Group of Eight Framework for evaluation of equity initiatives.

The framework provides an exploration of potential methods for evaluating a range of equity programs. A wide range of equity initiatives are encompassed by the framework, including outreach; selection; transition; learning support; and social and financial support.

The framework may assist with future benchmarking between Go8 institutions, and in developing a clearer understanding across the Australian higher education sector of the equity strategies that are the most effective in improving access and outcomes for under-represented groups. The framework recognises that both quantitative and qualitative

data must be used in order to assess the effects and effectiveness of equity initiatives and programs.

While it provides examples of indicators and justifications for their inclusion, the framework does not provide technical definitions or data sources. The focus of the framework is on discovering interventions that work—it is not a monitoring framework per se.

Widening participation in higher education for people from low SES backgrounds **(Deakin University)**

This report presents the outcomes from the Deakin University Participation and Partnerships Program (DUPPP), which addresses the policy issue of widening participation by people from low-SES backgrounds in higher education. The framework focuses on Deakin's engagement with community stakeholders, which could be used to guide, facilitate and advance its approach to widening participation (Phillips 2012).

The framework, developed with stakeholders, comprises several tools for strategic planning, monitoring and self-assessment purposes. These include:

- a 'program logic' model—to facilitate planning, implementation and measurement of Deakin's community partnership outputs and outcomes;
- partnerships tools—for guiding and managing the University's portfolio of cross-sectoral partnerships;
- self-assessment tools—including a set of engagement categories and indicators, and a partnership planning checklist.

Although this framework is conceptual in nature, it provides useful tools to monitor progress in and outcomes from developing partnerships with communities and stakeholders. This is important, as community engagement is a significant factor in influencing students' decisions about whether to attend university, which university to attend, which course of study to pursue, and so on.

Key measures for HEPPP planning and evaluation **(Monash University)**

To measure and evaluate outcomes from the HEPPP at Monash University, a number of key measures have been developed (Burnheim & Joschko 2012). To measure the Partnership component of HEPPP, Monash uses measures such as:

- partnership activities
- applications—for example, the number of low SES students applying to university in general, and Monash University in particular
- aspirations—for example, the proportion of Year 12 VTAC applicants who selected a university course as their first preference
- university offers—for example, the proportion of domestic Year 12 applicants receiving a final university offer.

Key measures for the participation component are listed in Table 4.6.

In order to more effectively target support interventions for different equity groups, they also use information on:

- demographics, such as postcode, SES, regional residence, mature age, home residence
- education background, such as secondary school attendance, sector, ATAR score
- admission pathways, such as current Year 12, non-school leavers, TAFE pathway

- course details, such as faculty, campus, attendance mode (for example, part-time, distance), course type and field of education.

A range of relevant data sources have been identified by Monash University to monitor the various measures. These include Monash internal data systems, VTAC, DIISRTE, the Australian Graduate Survey, ACARA, and data from the Victorian Government Department of Education and Early Childhood Development.

Table 4.6: Monash University key measures for participation

Stage	Measures
Selection	Preferences; offers; acceptances; Special Entry Access Scheme (SEAS); TAFE pathways
Access	Deferments; returned deferments; enrolments
Participation	Attainment; retention; success/progress; student experience; discontinuations
Completion	Course completions; progression to HDR
Graduate outcomes	Employment; salary; further study

Source: Adapted from Burnheim and Joschko 2012. HEPPP planning and evaluation at Monash.

Macquarie@50

This report is an internal policy framework developed by Macquarie University in light of its upcoming 50th anniversary in 2014 (Schwartz 2006). The main goal of the framework is to make Macquarie one of the top 8 research universities in Australia, and one of the top 200 universities in the world, by 2014. Part of the framework's vision includes improving social justice/equity within the university. While this framework does not provide quantitative targets, it identifies scholarships, outreach programs, mentoring programs and student support programs as approaches the university will implement to improve student diversity. It also considers establishing a science-based school on campus to attract talented students from all backgrounds to the university.

Review of participation in higher education of people from low socioeconomic backgrounds and Indigenous people **(Universities Australia)**

This report, prepared for Universities Australia in 2008, is a review of Australian and international practice and research relating to the participation of Indigenous people and people from low SES backgrounds in higher education (James et al. 2008). It is not an actual framework, but a report on equity in higher education that considers various factors that have been found to influence university access, participation, retention and success among these two groups.

A valuable part of the report is its overview of equity policies and trends in the United Kingdom, USA and Canada, which provide comparisons to Australia's position. It also provides a good overview of the limitations of using postcodes or locality to measure SES, and offers recommendations for an alternative SES measurement, namely father's education.

Institutional Assessment Framework **(Swinburne University)**

Swinburne University's Institutional Assessment Framework is another example of university reporting to the Australian Government, which includes an equity report (Swinburne University of Technology 2004). The equity report is a performance review of the university's measures to improve equity. Swinburne's equity priority groups in the 2005–07 triennium were rural and isolated students; students from low SES status backgrounds; students with disability; and women in non-traditional fields of study. In this report,

Indigenous students were considered separately and a review of the university's achievement of the goals outlined in the National Aboriginal and Torres Strait Islander Education Policy (AEP) was presented, as required under DIISRTE guidelines.

Institution Performance Portfolio (UWA)

The *Equity report* within the University of Western Australia's Institution Performance Portfolio is an example of a Table A university's annual reporting on equity initiatives and performance based on DIISRTE guidelines (UWA 2012). It not only assesses the university's performance in terms of student access, participation, retention and success, but also outlines the programs and strategies implemented by the university to improve equity.

Institutional Assessment Framework: equity update **(Charles Darwin University)**

This is an example of an equity report provided to the Australian Government in 2005 by Charles Darwin University in its Institutional Assessment Framework (Charles Darwin University 2005). The performance review of the university's measures for improving equity does not include any quantitative results, but outlines general trends in access, participation, retention and success rates for under-represented groups, and the measures implemented by the university to improve equity.

International frameworks/key reports

National Plan for Equity of Access to Higher Education 2008-2013 (Ireland)

In terms of equity, the Irish higher education system compares relatively well with other countries. Ireland's proportion of 25–34 year olds with a university degree places it in the top quartile of OECD countries, and around 50–55% of 17–18 year olds in Ireland enter higher education (HEA 2008). Nevertheless, the Irish Government recognises that further work is required to improve equity outcomes for low- to middle-income families and to improve male participation rates in higher education.

In 2008, the Irish Government set targets for higher education participation. They were:

- a national participation rate of 72% of the relevant age cohort by 2020
- an entry rate of at least 54% for all socioeconomic groups by 2020
- mature students to comprise at least 20% of total full-time entrants by 2013
- mature students to comprise 27% of all (full-time and part-time) entrants by 2013
- 17% of study programs to be provided in flexible/part-time mode
- 30% of all entrants to be admitted through non-standard entry routes by 2013
- double the number of students with sensory, physical and multiple disabilities in higher education by 2013 (HEA 2008).

Ireland does not have a comprehensive measurement framework for equity, but requires higher education institutions to report their student population profile in terms of key access criteria;, their pre-entry strategies and post-entry supports and services; and their targets for enhanced access (HEA 2008). Thus, in addition to the targets listed above, the Irish Government set the following targets:

- Ireland will reach European Union average levels for lifelong learning by 2010 and will move towards the top quartile of EU countries by 2013.
- The evidence base and relevant data collection systems will be enhanced.
- Institutions will develop and implement access plans and processes for evaluation.

Center for Urban Education (CUE) Equity Scorecard (USA)

The higher education sector in the United States is decentralised and made up of various institutions, including universities and colleges that are public, private (non-profit) or private (for-profit). There are also state-run universities and community colleges. The federal government runs the military colleges, and Tribal Colleges and Universities are run by and for Native Americans.

Over forty colleges, universities and state systems in the United States use the Equity Scorecard developed by Dr Estella Bensimon at the Centre for Urban Education in the University of Southern California in 2001 (USC 2013). The Equity Scorecard is a set of tools and a process that individual institutions use to identify inequities within their own institutions or systems; identify and implement strategies to address these inequities; and measure change over time through a facilitated process with staff from the Centre for Urban Education.

The important components to this process, which make it more than a measurement framework are its emphasis on the internal process of change within the institution; the fact that it is a facilitated process; the setting of realistic internal targets; the identification of key points at which students 'struggle or are lost' at university; and the incorporation and collection of qualitative and quantitative data to inform this process.

One of the tools is the equity scorecard itself, which sets out areas that higher educational institutions need to put indicators against. Those indicators will vary across institutions, however, depending upon their own characteristics. The scorecard measures indicators for access, retention, excellence and institutional receptivity as shown in Table 4.7 below.

Table 4.7: Equity measures used in the Equity Scorecard

Perspective	Measures
Access	Access to institutions, courses and resources
Retention	Number returning to school; transfer rates from community colleges to four-year institutions; degrees awarded
Excellence	Number of degrees awarded in competitive fields such as engineering or computer science
Institutional receptivity	Indicators of institutional support

Source: USC Policy Institute 2005. Measuring Equity in Higher Education: An Accountability Framework for California Colleges and Universities.

One of the key differences between this framework and other frameworks is its use of an 'equity index' rather than just presenting percentages or distributions. The equity index provides easy comparability across groups, and also addresses a key methodological issue—the fact that percentages can change because of changes in numerators (which may be related to policies or interventions) or because of changes in denominators (for example, the number of people in a specific group).

Equity indexes are calculated using the following formula:

$$\text{Equity Index} = \frac{\text{Target group with outcome/Total students with outcome}}{\text{Target group in population/Total students in population}}$$

An equity index of 1.0 indicates an equitable outcome for the target group (USC Policy Institute 2005). Numbers below 1 indicate inequity, while numbers above 1 demonstrate higher access.

Mapping of domains and indicators

During the review of the frameworks/key reports, maps were constructed summarising the key domains captured by each framework/key report (Appendix D, tables A4.2–A4.4), and the indicators included in each of the frameworks/key reports (Appendix E, Table A4.5). The two maps were then put together to develop an initial domain-indicator map (Appendix F, Table A4.6).

There were common domains covered across different equity frameworks/key reports; for example, with regard to individual factors, domains such as education background (for example, ATAR score; Year 12 attainment); Indigenous status; gender; disability; age; and ethnicity were addressed. A few frameworks covered literacy and numeracy, and only one framework covered aspirations and attitudes towards higher education. With regard to environmental or contextual factors, frameworks covered domains such as SES; geographic location; parental support; and education background (for example, school sector; support from secondary school teachers). Frameworks also covered organisational (or university-level) domains, including student engagement; student support (academic and financial); outreach and community engagement/partnerships; admissions pathways and processes; and flexible-learning opportunities.

The indicators included across the frameworks/key reports covered process and outcome measures at both the student and university level. Indicators pertaining to students tended to focus on outcomes at different stages of the university experience, such as access, participation, success, retention, attainment, and completion. A few frameworks also included post-university indicators on graduate outcomes—for example, employment status. Only a few frameworks included indicators on selection for university, student experience, student satisfaction, and discontinuations.

With regard to university processes and outcomes, the frameworks/key reports included fewer indicators at the university-level than at the student-level. However, of those that included university-level indicators, they covered research in equity and social inclusion; collaborations with external contributors such as secondary schools and employers; staff training and awareness regarding student support; increased participation of equity groups in the university workforce; and the number and type of scholarships awarded.

Summary

The review of the frameworks/key reports highlighted several key findings with implications for the development of a potential MFE:

- There is general agreement on outcome measures and their definitions (for example, access, participation, retention, completion rates).
- Frameworks/reports covered organisational (or university-level) domains, including student engagement and student support.
- A few frameworks/reports also included post-university indicators on graduate outcomes—for example, employment status.
- It is important to capture elements such as the pathways to and during enrolment—such as transfers to other courses/institutions, not just enrolment itself, as well as factors such as student experiences during university.

- Although one of the policy goals is to increase aspirations and applications to university among students from under-represented groups, these indicators are rarely captured in the frameworks (see Monash for one exception).

Potential indicators for a measurement framework for equity in higher education

A series of potential indicators were developed by matching available data with potential domains and indicators identified through the review of the frameworks and key reports as well as the goals of the policy initiatives and the literature review.

The potential indicators were then assessed against the following criteria/principles. Potential indicators which did not meet these criteria were excluded although they may have been important conceptually. First, the indicators had to meet the SMART criteria:

- specific to the higher education sector
- measurable
- aligned with the policy objectives
- relevant to the dimension being measured
- time-bound.

The indicators also needed to:

- measure inputs, outputs, and outcomes and were able to capture differences across equity groups
- be meaningful and understandable to a broad audience
- align with existing reporting frameworks and previous measurement frameworks where possible
- use existing data sources where possible to reduce burden on universities
- be comparable across the key units of analysis (for example, universities).

To ensure that the proposed set of indicators captures the key inputs, outputs and outcomes of the equity policies, they were first set out in a program logic model which follows the key phases in the life cycle of students (Figure 4.1):

- Phase 1: Pre-entry
- Phase 2: Offers, acceptances, and enrolments
- Phase 3: University experience
- Phase 4: Graduate outcomes.

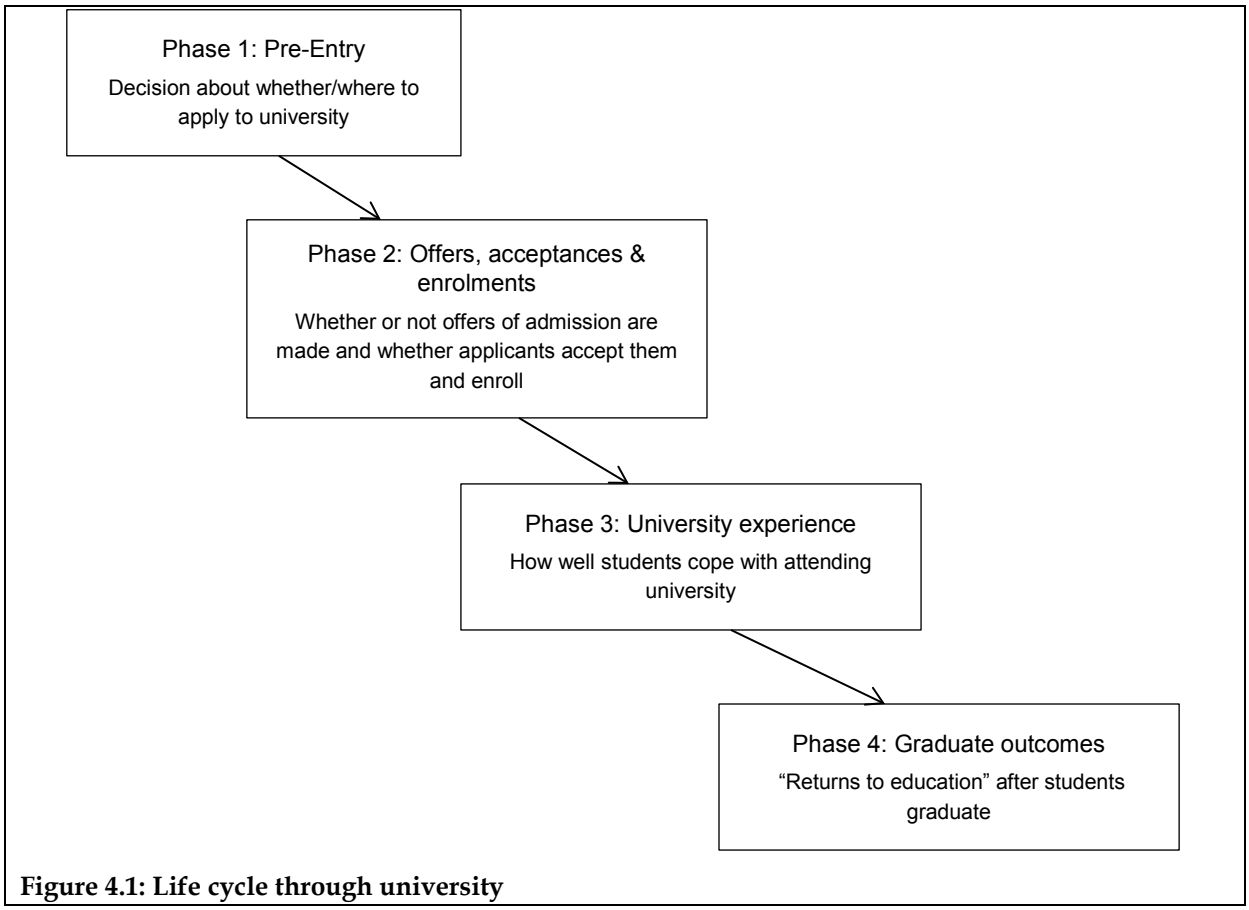


Figure 4.1: Life cycle through university

Potential indicators for these phases focus on the equity policies themselves, rather than on the background variables that lead to the inequity in the first place (for example, the distribution of low SES in the community).

Tables (4.8-4.12) were constructed for each phase, which included a specification of key policy goals for that phase and the processes or mechanisms expected to lead to those goals. A series of potential indicators was then matched to the specific inputs, outputs, and outcomes for each phase, along with suggested data source(s). The tables also include justifications for each potential indicator's inclusion.

Following a discussion of each phase, the next section adds indicators for the determinants of higher education participation and outcomes. The potential indicators were then organised into a three-tier model based on the structure of the Health Performance Framework (HPF):

- Tier 1: Educational attainment and outcomes
- Tier 2: Precursors of educational attainment
- Tier 3: Education system performance.

Phase 1: Pre-entry

The first key step in meeting the equity targets for higher education enrolment is increasing applications from people from low SES backgrounds, regional and remote areas, Indigenous Australians, and those with disabilities.

As shown in Table 4.8, the aims of both the government and individual universities are to increase the aspirations of attending university among those from under-represented groups, and subsequently to increase applications from those from under-represented groups.

To achieve these goals, universities are receiving funding to identify under-represented groups/communities and address existing barriers to university awareness, aspiration, and application through effective community partnership programs (for example, outreach), academic preparation, mentoring/role modelling, and by offering alternative pathways into university that do not rely on a particular ATAR score or attending straight out of high school.

The potential indicators in this phase include:

- 2 inputs (amount of funding and the number/types of planned programs/activities)
- 4 outputs (number and types of activities/programs run; the extent of the reach of those programs/activities; and the number and type of alternative pathways into university that are offered).
- 7 outcomes related to aspirations and applications.

These indicators capture where efforts are being targeted and the extent of their reach.

Seven key proposed outcomes measure whether there is subsequent change in aspirations and applications to university from those from equity groups. Improvements in these indicators over time would signal that the investment and effort from the government and universities may be having some effect (although they would not be the only factors responsible). Improvements in applications would also suggest ongoing progress towards meeting the equity goals. A lack of progress in increasing applications from members of equity groups, however, would indicate that efforts might need to be shifted or refocused.

Table 4.8: Potential indicators for Phase 1—Pre-entry

PHASE 1: PRE-ENTRY INTO UNIVERSITY

(INCLUDES SECONDARY SCHOOL STUDENTS AND MATURE AGE/NON-SCHOOL LEAVERS)

Goal 1: *Increase aspirations of attending university among under-represented groups*

Goal 2: *Increase applications to university from under-represented groups*

Process: Universities will identify under-represented groups/communities and address existing barriers to university awareness, aspiration, and application through effective community partnership programs such as outreach, academic preparation, mentoring/role modeling, and so forth…and by offering alternative pathways into university.

Potential measures and indicators to measure progress at the university and national levels

Type	Measure	Indicator	Justification	Data source(s)	Level at which indicator can be reported	Indicator number[(a)]
Inputs	Government investment	Amount of funding by type of program (e.g. HEPPP, ISP)	The amount of funding (overall and per university) is a marker of government priorities and investment in equity measures. Funding levels help determine the number of programs universities can run and their reach.	Education, yearly beginning 2010	Individual university Jurisdiction By program (e.g. HEPPP) National	3.01
	Planned interventions and priorities for improving equity in higher education	The number and types of agreed-upon equity-focused interventions by source of funding and target equity group	Documenting the types of supports universities planned to deliver will allow comparisons between universities as well as paint a national picture of types of programs, policies, and priorities which will also help identify gaps.	Education, 3-yearly mission-based compacts Special grants funding cycles	Individual university National Jurisdiction By type of intervention/program By target group	3.02
Outputs	University implementation of partnership building programs	The number and type of partnership activities by type of program and target group	These data represent what universities were able to achieve in practice. They can be compared to what was proposed and provide an aggregate view of target groups and type of strategies.	University reports to Education, yearly	Individual university National By type of activity (e.g. mentoring, outreach) By target group	3.10

(continued)

Table 4.8 (continued): Proposed indicators for Phase 1—Pre-entry

Type	Measure	Indicator	Justification	Data source(s)	Level at which indicator can be reported	Indicator number[(a)]
Outputs (continued)	Reach of the partnership building programs	The number and type of participants taking part in, or affected by, the activities, by type of activity and target group	These data are essentially for monitoring progress and setting realistic expectations—if students/schools/communities are not participating in the programs, then they are unlikely to have any effect on the desired outcomes.	University reports to Education, yearly	Individual university National By type of activity (e.g. mentoring, outreach) By target group	3.11
		Proportion of students who attended a university information session at a university or by a person from the university.	This indicator captures changes in time across the population and from the students' perspective.	LSAY	National By equity group	3.12
	Provision of alternative pathways to university	Types of alternative pathways offered into university (e.g. direct application, bonus ATAR points for target groups, entry from TAFE or pre-university prep course)	This indicator provides a summary of the type of pathways offered by universities which has been linked with increasing access and participation.	Not currently collected as part of any collection, but available from universities	University National By type	3.13
Outcomes	Aspirations	Proportion of students who were influenced by University representatives who visited their school	Captures whether outreach programs actually affect students	LSAY	National Jurisdiction By equity group	2.01
		Proportion of 15 year olds who intend to apply to university after finishing school	Captures whether there has been change in aspirations for attending university among both students and parents—which are key policy goals for the universities and the government	LSAY	National Jurisdiction By equity group	2.02
		Proportion of 15 year olds whose parents want them to apply to university after finishing school		LSAY	National Jurisdiction By equity group	2.03
		Proportion of 15 year olds who expect to complete a university degree		LSAY	National Jurisdiction By equity group	2.04

(continued)

Table 4.8 (continued): Proposed indicators for Phase 1—Pre-entry

Type	Measure	Indicator	Justification	Data source(s)	Level at which indicator can be reported	Indicator number[(a)]
Outcomes (continued)	Applications	Proportion of Year 12 students who apply to university by equity group	Increasing applications from members of equity groups is a key precondition for increasing enrolments. This indicator focuses on Year 12 leavers, while indicator 1.02 focuses on proportions of all applicants.	University applications and offers (for number of Year 12 applications), yearly; Denominator from ABS NSSC	National Jurisdiction	1.01
		Proportion of total applications by equity group		University applications and offers data collection, yearly	University National Jurisdiction	1.02
		Proportion of applications by type of application pathway	Captures the extent to which students from equity backgrounds are taking advantage of alternative pathways.	University applications and offers data collection, yearly Tertiary admissions centres Detailed data will need to be collected from universities	University National Jurisdiction	1.03

(a) Refers to indicator numbers in tier model (see Figure 1).

Phase 2: Offers, acceptances, and enrolment

The second key step in meeting the equity targets for higher education enrolment is increasing offers, acceptances and enrolments from people from low SES backgrounds, regional and remote areas, Indigenous Australians, and those with disabilities (Table 4.9).

To meet these goals, universities are using a range of strategies, including the use of alternative criteria or pathways into universities, and providing financial, academic, and social supports which will increase acceptances and enrolments of students from equity groups.

The potential indicators for this phase include:

- 3 inputs (amount of funding and the number/types of planned programs/activities, and planned equity targets at the university level)
- 2 outputs (number and types of activities/programs run, the extent of the reach of those programs/activities)
- 8 outcome variables focusing on the change in offers, acceptances, enrolments, and the percentage of universities meeting their enrolment targets.

Table 4.9: Potential indicators for Phase 2—Offers, acceptances, and enrolments

PHASE 2: OFFERS, ACCEPTANCE, AND ENROLMENTS INTO UNIVERSITY (INCLUDES YEAR 12 AND NON-YEAR 12 APPLICANTS)

Goal 1: *Increase offers made to applicants from under-represented groups*

Goal 2: *Increase acceptances of offers made to applicants from under-represented groups*

Goal 3: *Increase enrolments of students from under-represented groups*

Process: Universities will increase offers made to applicants from under-represented groups through the use of alternative criteria or pathways, and provide supports which will increase acceptances and enrolments of students from equity groups.

Potential measures and indicators to measure progress at the university and national levels

Type	Measure	Indicator	Justification	Data source(s)	Level at which indicator can be reported	Indicator number[(a)]
Inputs	Government investment	Amount of funding by type of program (e.g. HEPPP, ISP)	The amount of funding (overall and per university) is a marker of government priorities and investment in equity measures. Funding levels help determine the number of programs universities can run and their reach.	Education, beginning 2010 Available yearly	Individual university Jurisdiction By program (e.g. HEPPP) National	3.03
	Planned policies for increasing offers, acceptances and enrolments	The number and types of agreed-upon equity focused interventions by source of funding and target equity group	Documenting the types of supports universities planned to deliver will allow comparisons between universities as well as paint a national picture of types of programs, policies, and priorities which will also help identify gaps.	Education, 3 yearly mission-based compacts Special grants funding cycles	Individual university National Jurisdiction By type of policy By target group	3.04
	Targets set by universities for increasing enrolments by equity group	Low-SES target Other equity group chosen and the target set	Essential for measuring progress against low SES target at the university level. The distribution of other groups targeted paints a picture of where priorities/gaps are.	Reward Funding agreements/ mission-based compacts	Individual university By target group	3.05

(continued)

Table 4.9 (continued): Proposed indicators for Phase 2—Offers, acceptances, and enrolments

Type	Measure	Indicator	Justification	Data source(s)	Level at which indicator can be reported	Indicator number[(a)]
Outputs	Policies and practices for increasing offers, acceptances and enrolments	The number and type of policies or practices by target group (for example, bonus ATAR points awarded; guaranteed acceptance based on school attended; scholarships; and so forth).	These data represent what universities were able to achieve in practice. They can be compared to what was proposed and provide an aggregate view of target groups and type of strategies.	University reports to Education, yearly	Individual university National By type of policy By target group	3.14
		Number of scholarships offered by target group	An increase in scholarships will indicate greater financial support for students from equity groups and may encourage enrolments.	Higher Education Student Collection, yearly beginning 2008 (information on Commonwealth scholarships) University Administration Data (information on scholarships provided by individual universities)	Individual university Jurisdiction National By type of scholarship (Commonwealth vs University) By target group	3.15
Outcomes	Offers made	Proportion of applicants who are made an offer	Current data show disparities in offer rates—students cannot attend if they are not made an offer.	University applications and offers, yearly beginning 2008	Jurisdiction National By target group	1.04
		Proportion of students who apply and are made an offer by type of application process (for example, direct or through tertiary admissions centres).	Marker of whether the admission process or pathway affects offers made (which are likely to vary by equity group).	Undergraduate applications, offers and acceptances, yearly. Direct applications and offers first included in 2010	Individual university Jurisdiction National By target group	1.05
	Acceptance of offers	Proportion of applicants who receive an offer and reject it (by equity group and type of application pathway)	Indication of persistent barriers to enrolment and attendance at university	University applications and offers, yearly beginning 2008	Jurisdiction National By type of application (TAC or direct) By target group	1.06
		Proportion of applicants who defer the offer	Needs to be interpreted carefully—deferral may be made for reasons other than barriers (e.g. gap year, and so forth).	University applications and offers, yearly beginning 2008 Undergraduate applications, offers and acceptances, yearly beginning 2008	Jurisdiction National By target group	1.07

(continued)

Table 4.9 (continued): Proposed indicators for Phase 2—Offers, acceptances, and enrolments

Type	Measure	Indicator	Justification	Data source(s)	Level at which indicator can be reported	Indicator number[(a)]
Outcomes (continued)	Enrolment	Proportion of applicants who receive an offer and enrol (by equity group and type of application)	Key indicator in all frameworks to measure improvements in equity	University applications and offers, yearly beginning 2008 Internal university data	Jurisdiction National By target group	1.08
		Proportion of enrolments by equity group		University applications and offers, yearly beginning 2008	Jurisdiction National By target group	1.09
		Proportion of universities meeting their low-SES targets	Provides a measure of university-level progress towards their goals	Mandatory university reporting for reward funding	Individual universities Jurisdiction National	1.10
		Proportion of universities meeting their other equity group target (by target group)		Mandatory university reporting for reward funding	Individual universities Jurisdiction National By target group (other than low-SES)	1.11

(a) Refers to indicator numbers in tier model (see Figure 1).

Phase 3: University experience

Phase 3 focuses on students' experiences at university. Universities have received specific funding through HEPPP, HEDSP, and ISP to provide programs and supports to university students from under-represented groups that will improve their overall experiences at university and lead to greater success rates, retention rates and completion rates (Table 4.10). The strategies university use include tutoring, support/social groups, additional supports for students with disabilities, ensuring that coursework is culturally relevant, and addressing the culture at the university to ensure that it is socially inclusive.

The potential indicators for this phase include:

- 2 inputs (amount of funding and the number/types of planned programs/activities)
- 10 outputs (number and types of activities/programs run; the extent of the reach of those programs/activities, including financial supports, flexible study and course delivery; and staff diversity)
- 6 core outcome variables focusing on the change in success rates, retention rates, completion rates, and student satisfaction with support.

Table 4.10: Potential indicators for Phase 3—University experience

PHASE 3: UNIVERSITY EXPERIENCE

Goal: *Increase the success, retention, and completion rates of university students from equity groups*

Process: Universities will provide programs and supports to university students from under-represented groups that will improve their overall experiences at university and lead to greater success rates, retention rates and completion rates.

Potential measures and indicators to measure progress at the university and national levels

Type	Measure	Indicator	Justification	Data source(s)	Level at which indicator can be reported	Indicator number[(a)]
Inputs	Government investment	Amount of funding by type of program (e.g. HEPPP, ISP)	The amount of funding (overall and per university) is a marker of government priorities and investment in equity measures. Funding levels help determine the number of programs universities can run and their reach.	Education, yearly beginning 2010	Individual university Jurisdiction National By program (e.g. HEPPP)	3.06
	Planned programs to support students from under-represented groups while at university	The number and types of agreed-upon equity focused support strategies by source of funding and equity group(s) targeted	Documenting the types of supports universities planned to deliver will allow comparisons between universities as well as paint a national picture of types of programs, policies, and priorities which will also help identify gaps.	Education, 3-yearly mission-based compacts Special grants funding cycles	Individual university Jurisdiction National By type of strategy/activity By target group	3.07
Outputs	University implementation of support/participation programs	The number and type of support/participation activities by type of program and target group	These data represent what universities were able to achieve in practice. They can be compared to what was proposed and provide an aggregate view of target groups and type of strategies.	University reports to Education, yearly	Individual university Jurisdiction National By type of activity/strategy By target group	3.16
	Reach of the support/participation programs	The number and type of students partaking of the services, by type of activity and target group	These data are essentially for monitoring progress and setting realistic expectations—if students are not participating in the programs, then they are unlikely to have any effect on the desired outcomes.	University reports to Education, yearly	Individual university National By type of activity (e.g. tutoring, support groups, transition to university) By target group	3.17

(continued)

Table 4.10 (continued): Potential indicators for Phase 3—University experience

Type	Measure	Indicator	Justification	Data source(s)	Level at which indicator can be reported	Indicator number[(a)]
Outputs (continued)	Reach of the support/participation programs (continued)	**Financial support**				
		Proportion of students from equity groups receiving scholarships (by source—e.g. university-based, Commonwealth based)	Financial constraints are often cited as a barrier to university attendance & retention among students from under-represented groups—increases in the proportion of students from equity groups receiving financial support may increase retention.	Higher Education Student Collection (particularly for Australian Government scholarships) University administrative data collections (for other scholarships)	Individual university National Jurisdiction By equity group	3.18
		Number of equity scholarships awarded	These scholarships are specifically targeted at students from equity groups. An increase in the number of scholarships awarded indicates increased investment as well as met needs.	Higher Education Student Collection (particularly for Australian Government scholarships) University administrative data collections (for other scholarships)	Individual university National Jurisdiction By equity group	3.19
		Number and proportion of students receiving financial assistance through Austudy	Recent policy changes improving access to Centrelink student-related funding were partly designed to help improve the retention of students from disadvantaged backgrounds. Increased uptake is a measure of increased financial support.	Centrelink students collection	National Jurisdiction By equity group	3.20
		Number and proportion of Indigenous students receiving financial assistance through ABSTUDY		Centrelink students collection	National Jurisdiction	3.21
		Number and proportion of students receiving financial assistance through Youth Allowance		Centrelink students collection	National Jurisdiction By equity group	3.22

(continued)

Table 4.10 (continued): Potential indicators for Phase 3—University experience

Type	Measure	Indicator	Justification	Data source(s)	Level at which indicator can be reported	Indicator number[(a)]
Outputs (continued)	Reach of the support/participation programs (continued)	**Flexible study and course delivery**				
		Proportion of students enrolled part-time	Differences in the proportions enrolled part-time by equity group may reflect either individual preferences or having to balance work, family, and education.	Higher Education Student Data Collection, annual	Individual university National By equity group	3.23
		Proportion of students that study externally or multi-modal	Flexible study options have been proposed as a method for increasing the participation and retainment of students from under-represented groups, particularly those from regional and remote areas	Higher Education Student Data Collection, annual	Individual university National By equity group	3.24
	Staff diversity	Proportion of staff members who identify as being of Indigenous origin	Reflects level of staff members with whom Indigenous students may be able to identify and level of diversity at the university as a whole.	Higher Education Staff Collection	Individual university National	3.25
Outcomes	Success	Proportion of students who pass a unit that they are enrolled in	This set of indicators represents successful progression through university, and are key outcomes for identifying whether students from equity groups are achieving parity once they commence university.	Higher Education Student data collection	National Jurisdiction By equity group	1.12
	Retention	Proportion of students who re-enrol in a course in a given year Denominator: is the number of students enrolled in the previous year minus those completed		Higher Education Student data collection	National Jurisdiction By equity group	1.13
	Completion	Proportion of students who complete a course in a given year		Higher Education Student data collection	National Jurisdiction By equity group	1.14
		Proportion of students who complete a course within 5 years of commencing university study		University administrative data collections	Individual university National Jurisdiction By equity group	1.15

(continued)

Table 4.10 (continued): Potential indicators for Phase 3—University experience

Type	Measure	Indicator	Justification	Data source(s)	Level at which indicator can be reported	Indicator number[(a)]
Outcomes (continued)	Student satisfaction with student support	Proportion of students satisfied with quality of teaching	Increases in these measures will be indicative of improvements in students' perceptions about the level of support they receive and the quality of teaching. Differences between equity groups and other students may highlight additional gaps.	Australian Graduate Survey (CEQ): Good teaching scale	Individual university National Jurisdiction By equity group	1.16
		Proportion of students satisfied with level of student support		Australian Graduate Survey – Course Experience Questionnaire (AGS-CEQ): Student support scale	Individual university National Jurisdiction By equity group	1.17

(a) Refers to indicator numbers in tier model (see Figure 1).

Notes:

1. Some measurement frameworks have suggested breaking down the outcomes by course selected, and so forth. While doing so would be useful for individual universities, that level of disaggregation is probably not essential at the national level and is more appropriate for an evaluation rather than a measurement framework.
2. There are also more detailed financial support variables available; the indicators included in the table above reflect the major types of supports.
3. Data on the types of programs, program reach, and so forth were provided in several different reports made to the Department. A strategy for coding these data consistently would need to be developed.

Phase 4: Graduate outcomes

Phase 4 focuses on students who finish university to ensure that the outcomes reflect positively on the investments (financial, time, and so on) that students have made in obtaining an undergraduate degree (Table 4.11). These are particularly important for students from under-represented groups, not just in terms of fairness and equity in general, but also for the social impact of affecting aspirations in families and communities.

Universities use several strategies to improve the graduate outcomes of all their students, as well as students from under-represented groups in particular. These strategies include the provision of career counselling and pathways, traineeships, internships, and promoting post-graduate study opportunities.

The potential indicators for this phase include:

- 2 inputs (amount of funding and the number/types of planned programs/activities)
- 4 outputs (number and types of activities/programs run; the extent of the reach of those programs/activities)
- 6 outcome variables focusing on employment and graduate study in the short and long term post-graduate study.

Table 4.11: Potential indicators for Phase 4—Graduate outcomes

PHASE 4: GRADUATE OUTCOMES

Goal: *Improve the graduate outcomes for students from under-represented groups*

Process: Universities will provide support to undergraduate students from under-represented groups to support their transition from university into employment or further study.

Proposed measures and indicators to measure progress at the university and national levels

Type	Measure	Indicator	Justification	Data source(s)	Level at which indicator can be reported	Indicator number[(a)]
Inputs	Government investment	Amount of funding by type of program (e.g. HEPPP, ISP)	The amount of funding (overall and per university) is a marker of government priorities and investment in equity measures. Funding levels help determine the number of programs universities can run and their reach.	Education, yearly beginning 2010	Individual university Jurisdiction By program (e.g. HEPPP) National	3.08
	Planned supports to improve university outcomes	The number and types of agreed-upon equity-focused programs by source of funding and target equity group	Documenting the types of supports universities planned to deliver will allow comparisons between universities as well as paint a national picture of types of programs, policies, and priorities which will also help identify gaps.	Education, 3-yearly mission-based compacts Special grants funding cycles	Individual university National Jurisdiction By type of intervention/program By target group	3.09
Outputs	University implementation of activities/programs to support graduate outcomes	The number and type of activities by type of program and target group (e.g. career counselling, internships)	These data represent what universities were able to achieve in practice. They can be compared to what was proposed and provide an aggregate view of target groups and type of strategies.	University reports to Education, yearly	Individual university National By type of activity (e.g. career counselling, internships) By target group	3.26
	Reach of the graduate activities/programs	The number and type of participants taking part in the programs/activities, by type of activity and target group	These data are essential for monitoring progress and setting realistic expectations—if students are not participating in the programs, then they are unlikely to have any effect on the desired outcomes.	University reports to Education, yearly	Individual university National By type of activity (e.g. career counselling) By target group	3.27

(continued)

Table 4.11 (continued): Potential indicators for Phase 4: Graduate outcomes

Type	Measure	Indicator	Justification	Data source(s)	Level at which indicator can be reported	Indicator number[(a)]
Outputs (continued)	Reach of the graduate activities/programs (continued)	Number and proportion of students that used university careers services as part of their job search strategy	These two indicators provide a student-based measure of use of particular services—which can be compared with university reports.	AGS	University National By equity group	3.28
		Number and proportion of students that attended careers fairs or information sessions as part of their job search strategy		AGS	University National By equity group	3.29
Outcomes	Graduate employment Graduate employment (continued)	Proportion of students employed part-time or full-time 4 months after course completion	All four indicators are measures of the short-term and long-term returns to education. These are important markers not only of the 'payoff' of university and individual student investment, but they also have symbolic functions by making more visible the advantages of higher education attainment. Differences in these outcomes by equity group may suggest further intervention at the university level or may require further study.	AGS	University National By equity group	1.18
		Proportion of students employed in an area relevant to their course of study 4 months after course completion Denominator: number of students who completed 4 months prior		AGS	University National By equity group	1.19
		Proportion of students employed part-time or full-time 3 years after course completion		BGS	University National By equity group	1.20
		Proportion of students employed in an area relevant to their course of study 3 years after course completion		BGS	University National By equity group	1.21
	Graduate study	Proportion of students studying part-time or full-time 4 months after course completion	Although the primary focus of the equity policies is on undergraduate attainment, inequities persist at the graduate level as well. These indicators will measure the extent of the inequality as well as whether they decrease over time.	AGS	University National By equity group	1.22
		Proportion of students studying part-time or full-time 3 years after course completion		BGS	University National By equity group	1.23

Summary

Table 4.12 provides an overview of the number of potential indicators across type (input, output, outcome) and phase.

Table 4.12: Coverage of potential indicators by phase and type

Phase	Input indicators	Output Indicators	Outcome Indicators	Total
Pre-entry	2	4	7	13
Offers, acceptance and enrolment	3	2	8	13
University experience	2	10	6	18
Graduate outcomes	2	4	6	12
Total	**9**	**20**	**27**	**56**

There are a total of 56 potential indicators, with a balance between the inputs (funding, plans); the outputs (what universities and the government are providing and their reach); and outcomes that reflect the equity goals of increasing access, participation, and completion of university education for those from under-represented groups.

Proposed MFE

The program logic strategy was an important step in the development of the proposed MFE. However, a broader framework is required which includes precursors or predictors of higher education attainment and which groups key inputs, outputs, or outcomes across phases. Thus, the final step in the process was to use the Aboriginal and Torres Strait Islander HPF as a model for the proposed higher education MFE. The HPF model also better reflects the conceptual framework in Chapter 2 (Figure 2.2).

The HPF adopted the structure and definitions of the already endorsed National Health Performance Committee's (NHPC) Health Performance Framework (NHPC 2001). The NHPC framework acknowledged the broad range of factors that influence health status and outcomes, in contrast to the health performance frameworks of many international organisations. At the time, Canada and Australia appeared to be the only 2 countries that systematically included broader determinants within a health performance framework.

The Aboriginal and Torres Strait Islander HPF is based on 3 tiers of performance measurement:

Tier 1: Health status and health outcomes

Tier 1 includes measures of prevalence of disease or injury, human function, life expectancy and wellbeing. It tries to answer the questions: How healthy are people? Is it the same for everyone? What is the opportunity for improvement?

Tier 2: Determinants of health status

Tier 2 includes measures of the determinants of health including socioeconomic status, environmental factors and health behaviours. It tries to answer the questions: Are the factors that determine good health changing? Is it the same for everyone? Where and for whom are these factors changing?

Tier 3: Health systems performance

Tier 3 includes measures of health portfolio activities, including population health programs, primary health care services and acute care sectors. It tries to answer the questions: How well is the health system performing in delivering quality health actions to improve health? Is it the same for everyone?

The framework recognises that health status and outcomes (Tier 1) are influenced by both determinants of health (Tier 2) and the performance of health systems (Tier 3).

Similar tiers were created for the potential MFE:

- Tier 1: Educational attainment and outcomes
- Tier 2: Predictors of educational attainment
- Tier 3: Educational system performance.

Tier 1 encompasses the attainment and outcome measures that form the key targets and goals for the programs and policies. Tier 2 includes predictors of educational attainment (including aspirations as well as educational performance and developmental outcomes), which previous research has shown vary by equity group. Tier 3 includes process measures of the efforts and strategies that universities and the government are undertaking to try to create change in the Tier 1 outcomes. The Tier 3 indicators are essential for monitoring both the aim and reach of these strategies.

Figure 4.2 presents the potential indicators for an MFE. There are 23 potential Tier 1 output indicators, 9 potential Tier 2 predictor indicators, and 29 potential Tier 3 performance measures. The numbering system for potential indicators within each tier is as follows: input indicators are numbered first, followed by output indicators, then outcome indicators.

Tables 4.13-4.15 (at the end of this chapter) present detailed information on each potential indicator, including the data source, whether the indicator would require standardisation, and whether disaggregation is possible by equity group (low-SES, Indigenous, regional/remote, disability), by level (jurisdiction, university), and by program type/activity.

The data in these tables can be used as a starting point to inform subsequent discussions/ consultations about the costs, benefits, and feasibility of including each potential indicator in the next iteration of the framework. It is important to note the findings from the current review of university reporting requirements (PhillipsKPA 2012) which highlighted the current burden on universities and recommended not only that streamlined processes be used in equity reporting, but that the reporting requirements need to be aligned against the proposed MFE. Thus, it was important to include data that are already being collected at the university level, even if they are not publicly reported.

TIER 1

Educational attainment and outcomes (measured at university, jurisdiction, population levels)

Pre-entry	Offers, acceptances, enrolments	University experience	Graduate outcomes
1.01 Year 12 applications	1.04 Offers	1.12 Students who pass	*Employment – any job:*
1.02 Applications	1.05 Offers by process	1.13 Re-enrolments within a year	1.18 within 4 months
1.03 Application pathways	1.06 Rejected offers	1.14 Completed courses in a given year	1.20 within 3 years
	1.07 Deferments	1.15 Completed courses within 5 years	*Employment – in a job related to course:*
	1.08 Offers and enrolments	1.16 Satisfaction with quality of teaching	1.19 within 4 months
	1.09 Enrolments	1.17 Satisfaction with student support	1.21 within 3 years
	1.10 Meeting low SES targets		*Further study after completion:*
	1.11 Meeting other equity group targets		1.22 within 4 months
			1.23 within 3 years

TIER 2

Precursors of higher educational attainment

Pre-entry

2.01 Influence of university representatives

2.02 Intention to apply for university

2.03 Parental intent for students to apply for university

2.04 Expectation to complete university

2.05 Vulnerability across developmental domains

2.06 Literacy and numeracy

2.07 School attendance

2.08 Year 12 completions

2.09 ATAR scores

TIER 3

Education system performance

Pre-entry	Offers, acceptances and enrolments	University experience	Post graduate outcomes
3.01 Funding by program type	3.03 Funding by program type	3.06 Funding by program type	3.08 Funding by program type
3.02 Equity-focussed interventions by funding source and equity group	3.04 Equity-focussed interventions by funding source and equity group	3.07 Equity-focussed interventions by funding source and equity group	3.09 Equity-focussed interventions by funding source and equity group
3.10 Number of partnership activities	3.05 University target for low SES and other selected equity groups	3.16 Number of support and participation activities	3.26 Activities by type of program and target group
3.11 Number of participants in activities	3.14 Policies and practices	3.17 Number of students using services	3.27 Number of participants in programs/activities
3.12 Information session attendance	3.15 Scholarships	3.18 Scholarships by source	3.28 Use of university career services
3.13 Alternate pathway types		3.19 Number of equity scholarships awarded	3.29 Attendance at careers fairs or information sessions
		3.20 Austudy	
		3.21 ABSTUDY	
		3.22 Youth allowance	
		3.23 Part-time enrolments	
		3.24 External/multi-modal study	

Note: Where possible indicators to be measured by Indigenous status, socioeconomic disadvantage, regional/remoteness, disability, non-English speaking background, year at university, and calendar year. The numbering system for potential indicators within each tier is as follows: input indicators are numbered first, followed by output indicators, then outcome indicators. See Table 4.16 for full descriptions and data sources for each indicator.

Figure 4.2: Potential measurement framework for equity in higher education

Measuring progress towards the targets

The proposed MFE includes potential indicators for each of the three tiers to measure progress in the factors affecting the key policy targets. However, it is also important to monitor change in the long-term targets themselves. Table 4.13 sets out those targets and highlights the current picture. It is important to remember that these are national targets—individual universities will have their own specific targets.

Trajectories can be calculated towards the expected dates based on current and previous trends in each area, and then yearly (or five yearly) progress can be measured against those.

Table 4.13: Long term equity targets, data sources and, current rates, 2011

Target	Measure		Current rates		Reference point
By 2020, students from low SES backgrounds make up 20% of all university enrolments (with an interim target of 18.5% by 2018)	Percentage of enrolled students from low SES areas		SES of postcode	SES of CD	
			16.8	15.6	20.0
Achieve population parity in enrolments and completions for core equity groups (no date set)	Percentage of enrolled students and completion rates for each equity group		Enrolment	Completion[a]	
		Indigenous	1.4	0.8	2.6[b]
		Regional	18.6	16.4	29.1[c]
		Remote	0.9	0.8	2.3[d]
		Disability	5.1	4.0	10.2[e]
		NESB	3.1	3.4	3.1[f]
		Women	17.8	n.a.	17.8
By 2025, 40% of 25–34 year olds will have attained at least a bachelor-level qualification.	Percentage of 25-34 year old Australians with at least a bachelor degree		2006	2011	
			29.2	35.0	40.0

(a) Includes Table A institutions only.

(b) Percentage of Australian population aged 15–64 that identified as Indigenous in the 2011 Census.

(c) Percentage of estimated Australian population aged 15–64 classified as living in a regional area in 2010 by the ABS. Care should be taken when interpreting this figure as the definition of regional varies between the ABS and DIISRTE (see the 'Definitional and measurement issues of equity groups' section in Chapter 4).

(d) Percentage of estimated Australian population aged 15–64 classified as living in a remote area in 2010 by the ABS.

(e) Percentage of people aged 15-64 who were reported to have a disability that restricts their schooling or employment in the Survey of Disability, Ageing and Carers conducted by the ABS from April to December 2009. For comparison, the 2011 DIISRTE Equity Reference Value for students with disability was 8% for all states.

(f) Percentage of Australian population aged 15–64 classified as recent migrants born in a non-English speaking country in the ABS Characteristics of Recent Migrants survey, November 2010.

Source: DIISRTE (2012a) and ABS (2010a; 2011a; 2011b; 2012c)

Next steps

This paper has presented a series of potential indicators which could be included in a 3-tiered model of an MFE. Further development would involve consultation regarding both the structure and the potential indicators. There are also several overarching issues to be considered, including:

- At the moment the potential MFE is focused on equity issues relating to transition into, experience during, and experiences post-university. The predictor factors that have been

included are primarily related to schooling (except for the AEDI). Other variables are available measuring factors such as family background, children's health, and so forth. Should these other indicators be included as well, and to what level of detail?

- Consideration should be given to constructing equity indexes for some of the key indicators rather than just presenting them as percentages.
- Only indicators for which data are already available, or which would require only slight changes to existing reporting requirements have been included. How much potential is there for the development of indicators which may capture some of the qualitative aspects of university or student experience which are also linked to these outcomes?

Following agreement on the next iteration of the potential indicators in the proposed three-tier model, the following actions could be taken:

- Assess the technical soundness of the proposed performance measures using the available evidence (validity, reliability, sensitivity, attributability).
- Trial the variables. If changes to data definitions are proposed, include analyses of financial imposts.
- Assess the feasibility of the performance measures.
  - Are recent good quality data available for this measure?
  - Can the data be updated regularly?
  - Is the data nationally consistent?
- Examine the balance of performance measures across:
  - inputs, processes, outputs, intermediate outcomes and long-term outcomes
  - priority issues for the relevant various equity populations
  - all domains of the higher education system.
- Seek feedback from universities and other stakeholders (e.g., state education departments) on the MFE. Iterate over the selection process until an agreed MFE is arrived at.

Table 4.14: Tier 1 (Educational attainment and outcomes): potential indicators with data sources and disaggregates

Indicator number	Measure	Indicator	Category	Existing data source?	Data source	Data standardised? [a]	Disaggregation available and feasible: Low SES	Indigenous	Remoteness	Disability	NESB	National	Jurisdiction	University	Program/ activity type
1.01	Applications	Proportion of Year 12 students who apply to university by equity group	Outcome	Yes	Numerator: University Applications and Offers, yearly Denominator: NSSC, yearly	Yes	✓	✓	✓		✓	✓	✓		
1.02	Applications	Proportion of total applications by equity group	Outcome	Yes	University Applications and Offers data collection, yearly	Yes	✓	✓	✓		✓	✓	✓		
1.03	Applications	Proportion of applications by type of application pathway	Outcome	Yes	University Applications and Offers data collection, yearly	Yes	✓	✓	✓		✓	✓	✓		
				Yes	Tertiary admissions centres	No	✓	✓	✓	✓	✓	✓	✓		
				Yes	University administrative collections may be required for detailed data	No	✓	✓	✓	✓	✓	✓	✓		
1.04	Offers made	Proportion of applicants who receive an offer	Outcome	Yes	University Applications and Offers data collection, yearly	Yes	✓	✓	✓		✓	✓	✓		

(continued)

Table 4.14 (continued): Tier 1 (Educational attainment and outcomes): potential indicators with data sources and disaggregation

Indicator number	Measure	Indicator	Category	Existing data source?	Data source	Data standardised? [(a)]	Disaggregation available and feasible								
							Low SES	Indigenous	Remoteness	Disability	NESB	National	Jurisdiction	University	Program/ activity type
1.05	Offers made	Proportion of students who apply and are made an offer by type of application process (e.g. direct; tertiary admissions centre)	Outcome	Yes	Undergraduate Application, Offers and Acceptances, yearly (direct applications and offers first included in 2010)	Yes	✓	✓	✓	✓	✓	✓	✓	✓	
1.06	Acceptance of offers	Proportion of applicants who receive an offer and reject it (by equity group and type of application pathway)	Outcome	Yes	University Applications and Offers, yearly beginning 2008	Yes	✓	✓	✓		✓	✓	✓		
1.07	Acceptance of offers	Proportion of applicants who defer the offer	Outcome	Yes	University Applications and Offers, yearly beginning 2008	Yes	✓	✓	✓		✓	✓	✓		
				Yes	Undergraduate Applications, Offers and Acceptance, yearly beginning 2008	Yes	✓	✓	✓	✓	✓	✓	✓		

(continued)

Table 4.14 (continued): Tier 1 (Educational attainment and outcomes): potential indicators with data sources and disaggregation

Indicator number	Measure	Indicator	Category	Existing data source?	Data source	Data standardised? (a)	Disaggregation available and feasible								
							Low SES	Indigenous	Remoteness	Disability	NESB	National	Jurisdiction	University	Program/ activity type
1.08	Enrolment	Proportion of applicants who receive an offer and enrol (by equity group and type of application)	Outcome	Yes	University Applications and Offers, yearly beginning 2008	Yes	✓	✓	✓		✓	✓	✓		
				Yes	Internal university data	No	✓	✓	✓	✓	✓	✓			
1.09	Enrolment	Proportion of enrolments by equity group	Outcome	Yes	University Applications and Offers, yearly beginning 2008	Yes	✓	✓	✓		✓	✓	✓		
1.10	Enrolment	Proportion of universities meeting their low SES targets	Outcome	Yes	Mandatory university reporting for reward funding	No	✓					✓	✓	✓	
1.11	Enrolment	Proportion of universities meeting their other equity group target (by target group)	Outcome	Yes	Mandatory university reporting for reward funding	No		✓	✓	✓	✓	✓	✓	✓	

(continued)

Table 4.14 (continued): Tier 1 (Educational attainment and outcomes): indicators with data sources and disaggregates

Indicator number	Measure	Indicator	Category	Existing data source?	Data source	Data standardised? (a)	Disaggregation available and feasible								
							Low SES	Indigenous	Remoteness	Disability	NESB	National	Jurisdiction	University	Program/ activity type
1.12	Success	Proportion of students who pass a unit they are enrolled in	Outcome	Yes	Higher Education Student Collection, yearly beginning 2008	Yes	✓	✓	✓	✓	✓	✓		✓	
1.13	Retention	Proportion of students who re-enrol in a course in a given year	Outcome	Yes	Higher Education Student Collection, yearly beginning 2008	Yes	✓	✓	✓	✓	✓	✓		✓	
1.14	Completion	Proportion of students who complete a course in a given year	Outcome	Yes	Higher Education Student Collection, yearly beginning 2008	Yes	✓	✓	✓	✓	✓	✓		✓	
1.15	Completion	Proportion of students who complete a course within 5 years of commencing university study	Outcome	Yes	University administrative data collections	No	✓	✓	✓	✓	✓	✓	✓	✓	
1.16	Student satisfaction with student support	Proportion of students satisfied with quality of teaching	Outcome	Yes	Australian Graduate Survey - Course Experience Questionnaire (AGS-CEQ): 'Good teaching' scale	Yes	✓	✓	✓	✓	✓	✓		✓	

(continued)

Table 4.14 (continued): Tier 1 (Educational attainment and outcomes): indicators with data sources and disaggregates

Indicator number	Measure	Indicator	Category	Existing data source?	Data source	Data standardised? (a)	Disaggregation available and feasible								
							Low SES	Indigenous	Remoteness	Disability	NESB	National	Jurisdiction	University	Program/ activity type
1.17	Student satisfaction with student support	Proportion of students satisfied with level of student support	Outcome	Yes	Australian Graduate Survey - Course Experience Questionnaire (AGS-CEQ): 'Student support' scale	Yes	✓	✓	✓	✓	✓	✓		✓	
1.18	Post-graduate employment	Proportion of students employed part-time or full-time 4 months after course completion	Outcome	Yes	Australian Graduate Survey	Yes	✓	✓	✓	✓	✓	✓		✓	
1.19	Post-graduate employment	Proportion of students employed in an area relevant to their course of study 4 months after course completion	Outcome	Yes	Australian Graduate Survey	Yes	✓	✓	✓	✓	✓	✓		✓	
1.20	Post-graduate employment	Proportion of students employed part-time or full-time 3 years after course completion	Outcome	Yes	Beyond Graduation Survey	Yes	✓	✓	✓	✓	✓	✓		✓	

(continued)

Table 4.14 (continued): Tier 1 (Educational attainment and outcomes): indicators with data sources and disaggregates

Indicator number	Measure	Indicator	Category	Existing data source?	Data source	Data standardised? (a)	Disaggregation available and feasible								
							Low SES	Indigenous	Remoteness	Disability	NESB	National	Jurisdiction	University	Program/ activity type
1.21	Post-graduate employment	Proportion of students employed in an area relevant to their course of study 3 years after course completion	Outcome	Yes	Beyond Graduation Survey	Yes	✓	✓	✓	✓	✓	✓		✓	
1.22	Post-graduate study	Proportion of students studying part-time or full-time 4 months after course completion	Outcome	Yes	Australian Graduate Survey	Yes	✓	✓	✓	✓	✓	✓		✓	
1.23	Post-graduate study	Proportion of students studying part-time or full-time 3 years after course completion	Outcome	Yes	Beyond Graduation Survey	Yes	✓	✓	✓	✓	✓	✓		✓	

(a) Data standardisation refers to whether the data, as they are currently collected, are already standardised (e.g. has technical specifications and directions, so that data are reported in the same way). So, for example, although universities reported the types of programs they ran in their reports to Education, the data is qualitative and reported in different ways by different universities. Consequently, in order to report on indicators that use data sources which are not standardised, the relevant component of the data collection would need to be standardised.

Table 4.15: Tier 2 (Precursors of higher education attainment): potential indicators with data sources and disaggregates

Indicator number	Measure	Indicator	Category	Existing data source?	Data source	Data standardised? [(a)]	Disaggregation available and feasible								
							Low SES	Indigenous	Remoteness	Disability	NESB	National	Jurisdiction	University	Program/ activity type
2.01	Aspirations	Proportion of students who were influenced by university representatives who visited their school	Outcome	Yes	LSAY	Yes	✓	✓	✓	✓	✓	✓			
2.02	Aspirations	Proportion of 15 year olds who intend to apply to university after finishing school	Outcome	Yes	LSAY	Yes	✓	✓	✓	✓	✓	✓			
2.03	Aspirations	Proportion of 15 year olds whose parents want them to apply to university after finishing school	Outcome	Yes	LSAY	Yes	✓	✓	✓	✓	✓	✓			
2.04	Aspirations	Proportion of 15 year olds who expect to complete a university degree	Outcome	Yes	LSAY	Yes	✓	✓	✓	✓	✓	✓			
2.05	Early development	Percent vulnerable on at least 1 of the 5 domains	Precursor	Yes	Australian Early Development Index (AEDI)	Yes	✓	✓	✓	✓	✓	✓			

(continued)

Table 4.15 (continued): Tier 2 (Precursors of higher education attainment): indicators with data sources and disaggregates

Indicator number	Measure	Indicator	Category	Existing data source?	Data source	Data standardised? (a)	Disaggregation available and feasible								
							Low SES	Indigenous	Remoteness	Disability	NESB	National	Jurisdiction	University	Program/ activity type
2.06	Literacy and numeracy levels	Comparable results between students belonging to an equity group and other Australian students for literacy and numeracy	Precursor	Yes	NAPLAN data annually for grades 3, 5, 7, and 9	Yes	✓	✓	✓	✓	✓	✓			
2.07	School attendance	Attendance rates school, by equity group	Precursor	Yes	National Schools Attendance Collection (NSAC)	Yes	✓	✓	✓	✓	✓	✓			
2.08	Year 12 completion	Proportion of students in an equity group who have completed Year 12	Precursor	Yes	Survey of Education and Work, annually since 1964	Yes	✓	✓	✓	✓	✓	✓			
2.09	ATAR	Proportion of students in an equity group attaining an ATAR score	Precursor	Yes	LSAY	Yes	✓	✓	✓	✓	✓	✓			

(a) Data standardisation refers to whether the data, as they are currently collected, are already standardised (e.g. has technical specifications and directions, so that data are reported in the same way). So, for example, although universities reported the types of programs they ran in their reports to Education, the data is qualitative and reported in different ways by different universities. Consequently, in order to report on indicators that use data sources which are not standardised, the relevant component of the data collection would need to be standardised.

Table 4.16: Tier 3 (Education system performance): potential indicators with data sources and disaggregates

Indicator number	Measure	Indicator	Category	Existing data source?	Data source	Data standardised? [(a)]	Disaggregation available and feasible								
							Low SES	Indigenous	Remoteness	Disability	NESB	National	Jurisdiction	University	Program/ activity type
3.01	Government investment	Amount of funding by type of program (e.g. HEPPP, ISP)	Input	Yes	Education, yearly beginning 2010	No						✓	✓	✓	✓
3.02	Planned interventions and priorities for improving equity in higher education	The number and types of agreed-upon equity-focused interventions by source of funding and target equity group	Input	Yes	3-yearly mission-based compacts Special grants funding cycles	No	✓	✓	✓	✓	✓	✓	✓	✓	✓
3.03	Government investment	Amount of funding by type of program (e.g. HEPPP, ISP)	Input	Yes	Education, yearly beginning 2010	No						✓	✓	✓	✓
3.04	Planned policies for increasing offers, acceptances and enrolments	The number and types of agreed-upon equity-focused interventions, by source of funding and target equity group	Input	Yes	3-yearly mission-based compacts Special grants funding cycles	No	✓	✓	✓	✓	✓	✓	✓	✓	✓

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Table 4.16 (continued): Tier 3 (Education system performance): potential indicators with data sources and disaggregates

Indicator number	Measure	Indicator	Category	Existing data source?	Data source	Data standardised? [(a)]	Disaggregation available and feasible								
							Low SES	Indigenous	Remoteness	Disability	NESB	National	Jurisdiction	University	Program/ activity type
3.05	Targets set by universities for increasing enrolments by equity group	Low SES target Targets set for other equity groups	Input	Yes	Reward Funding agreements	No	✓	✓	✓	✓	✓			✓	
3.06	Government investment	Amount of funding by type of program (e.g. HEPPP, ISP)	Input	Yes	Education, yearly beginning 2010	No						✓	✓	✓	✓
3.07	Planned programs to support students from under-represented groups while at university	The number and types of agreed-upon equity focused support strategies by source of funding and equity group(s) targeted	Input	Yes	3 yearly mission-based compacts Special grants funding cycles	No	✓	✓	✓	✓	✓	✓	✓	✓	✓
3.08	Government investment	Amount of funding by type of program (e.g. HEPPP, ISP)	Input	Yes	Education, yearly beginning 2010	No						✓	✓	✓	✓
3.09	Planned supports to improve post-university outcomes	The number and types of agreed-upon equity-focused programs by source of funding and target equity group	Input	Yes	3 yearly mission-based compacts Special grants funding cycles	No	✓	✓	✓	✓	✓	✓	✓	✓	✓

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Table 4.16 (continued): Tier 3 (Education system performance): indicators with data sources and disaggregates

Indicator number	Measure	Indicator	Category	Existing data source?	Data source	Data standardised? [(a)]	Disaggregation available and feasible								
							Low SES	Indigenous	Remoteness	Disability	NESB	National	Jurisdiction	University	Program/ activity type
3.10	University partnership building programs	The number and type of partnership activities by type of program and target group	Output	Yes	University reports to Education, yearly	No	✓	✓	✓	✓	✓	✓		✓	✓
3.11	Reach of the partnership building programs	The number and type of participants taking part in, or affected by, the activities, by type of activity and target group	Output	Yes	University reports to Education, yearly	No	✓	✓	✓	✓	✓	✓		✓	✓
3.12	Reach of the partnership building programs	Proportion of students who attended a university information session at a university or by a person from the university.	Output	Yes	LSAY	Yes	✓	✓	✓	✓	✓	✓			

(continued)

Table 4.16 (continued): Tier 3 (Education system performance): potential indicators with data sources and disaggregates

Indicator number	Measure	Indicator	Category	Existing data source?	Data source	Data standardised? [(a)]	Disaggregation available and feasible								
							Low SES	Indigenous	Remoteness	Disability	NESB	National	Jurisdiction	University	Program/ activity type
3.13	Provision of alternative pathways to university	Types of alternative pathways offered into university (e.g. direct application; bonus ATAR points for target groups; entry from TAFE or pre-university prep course)	Output	No	Would have to be sourced from universities	No, but data collection could be set up to be standardised									
3.14	Policies and practices for increasing offers, acceptances and enrolments	The number and type of policies or practices by target group (e.g. bonus ATAR points awarded, guaranteed acceptance based on school attended, scholarships, etc.).	Output	Yes	University reports to Education, yearly	No	✓	✓	✓	✓	✓	✓		✓	✓
3.15	Policies and practices for increasing offers, acceptances and enrolments	Number of scholarships offered by target group	Output	Yes	Higher Education Student Collection, yearly beginning 2008 (information on Commonwealth scholarships)	Yes	✓	✓	✓	✓	✓	✓		✓	

(continued)

Table 4.16 (continued): Tier 3 (Education system performance): potential indicators with data sources and disaggregates

Indicator number	Measure	Indicator	Category	Existing data source?	Data source	Data standardised? [(a)]	Disaggregation available and feasible								
							Low SES	Indigenous	Remoteness	Disability	NESB	National	Jurisdiction	University	Program/ activity type
3.15 continued				Yes	University administration data (information on scholarships provided by individual universities)	No	✓	✓	✓	✓	✓	✓		✓	
3.16	University support/ participation programs	The number and type of support/ participation activities by type of program and target group	Output	Yes	University reports to Education, yearly	No	✓	✓	✓	✓	✓	✓	✓	✓	✓
3.17	Reach of the support/ participation programs	The number and type of students partaking of the services, by type of activity and target group	Output	Yes	University reports to Education, yearly	No	✓	✓	✓	✓	✓	✓		✓	✓
3.18	Reach of the support/participation programs: financial support	Proportion of students from equity groups receiving scholarships (by source—for example, university-based, Australian Government based)	Output	Yes	Higher Education Student Collection, yearly beginning 2008 (information on Commonwealth scholarships)	Yes	✓	✓	✓	✓	✓	✓		✓	

(continued)

Table 4.16 (continued): Tier 3 (Education system performance): potential indicators with data sources and disaggregates

Indicator number	Measure	Indicator	Category	Existing data source?	Data source	Data standardised? [(a)]	Disaggregation available and feasible								
							Low SES	Indigenous	Remoteness	Disability	NESB	National	Jurisdiction	University	Program/ activity type
3.18 continued				Yes	University administration data (information on scholarships provided by individual universities)	No	✓	✓	✓	✓	✓	✓		✓	
3.19	Reach of the support/ participation programs: financial support	Number of equity scholarships awarded	Output	Yes	University administration data (information on scholarships provided by individual universities)	No	✓	✓	✓	✓	✓	✓		✓	
3.20	Reach of the support/ participation programs: financial support	Number and proportion of students receiving financial assistance through Austudy	Output	Yes	Centrelink students collection	Yes	✓	✓	✓	✓	✓	✓	✓		
3.21	Reach of the support/ participation programs: financial support	Number and proportion of Indigenous students receiving financial assistance through ABSTUDY	Output	Yes	Centrelink students collection	Yes						✓	✓		

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Table 4.16 (continued): Tier 3 (Education system performance): potential indicators with data sources and disaggregates

Indicator number	Measure	Indicator	Category	Existing data source?	Data source	Data standardised? [(a)]	Disaggregation available and feasible								
							Low SES	Indigenous	Remoteness	Disability	NESB	National	Jurisdiction	University	Program/ activity type
3.22	Reach of the support/ participation programs: financial support	Number and proportion of students receiving financial assistance through Youth Allowance	Output	Yes	Centrelink students collection	Yes	✓	✓	✓	✓	✓	✓	✓		
3.23	Reach of the support/ participation programs: flexible study and course delivery	Proportion of students enrolled part-time	Output	Yes	Higher Education Student Collection, yearly beginning 2008	Yes	✓	✓	✓	✓	✓	✓		✓	
3.24	Reach of the support/ participation programs: flexible study and course delivery	Proportion of students that study externally or multi-modal	Output	Yes	Higher Education Student Collection, yearly beginning 2008	Yes	✓	✓	✓	✓	✓	✓		✓	
3.25	Staff diversity	Proportion of staff members who identify as being of Indigenous origin	Output	Yes	Higher Education Staff Collection, yearly beginning 2008	Yes		✓				✓		✓	

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Table 4.16 (continued): Tier 3 (Education system performance): potential indicators with data sources and disaggregates

Indicator number	Measure	Indicator	Category	Existing data source?	Data source	Data standardised? [(a)]	Disaggregation available and feasible								
							Low SES	Indigenous	Remoteness	Disability	NESB	National	Jurisdiction	University	Program/ activity type
3.26	University activities/ programs to support post-graduate outcomes	The number and type of activities by type of program and target group (e.g. careers counselling, internships)	Output	Yes	University reports to Education, yearly	No	✓	✓	✓	✓	✓	✓		✓	✓
3.27	Reach of the post-graduate activities/ programs	The number and type of participants taking part in the programs/ activities, by type of activity and target group	Output	Yes	University reports to Education, yearly	No	✓	✓	✓	✓	✓	✓		✓	✓
3.28	Reach of the post-graduate activities/ programs	Number and proportion of students that used university careers services as part of their job search strategy	Output	Yes	Australian Graduate Survey	Yes	✓	✓	✓	✓	✓	✓		✓	
3.29	Reach of the post-graduate activities/ programs	Number and proportion of students that attended careers fairs or information sessions as part of their job search strategy	Output	Yes	Australian Graduate Survey	Yes	✓	✓	✓	✓	✓	✓		✓	

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Appendix A: Australian universities

Table A1.1: List of Australian universities

	University	State/territory
Table A providers		
Group of Eight	Australian National University	ACT
	Monash University	Vic
	University of Adelaide	SA
	University of Melbourne	Vic
	University of Queensland	Qld
	University of Sydney	NSW
	University of Western Australia	WA
	University of New South Wales	NSW
Australian Technology Network	Curtin University of Technology	WA
	Queensland University of Technology	Qld
	RMIT University	Vic
	University of South Australia	SA
	University of Technology, Sydney	NSW
Innovative Research Universities	Charles Darwin University	NT
	Flinders University	SA
	Griffith University	Qld
	James Cook University	Qld
	La Trobe University	Vic
	Murdoch University	WA
	University of Newcastle	NSW
Regional Universities Network	Central Queensland University	Qld
	Southern Cross University	NSW
	Federation University	Vic
	University of New England	NSW
	University of Southern Queensland	Qld
	University of the Sunshine Coast	Qld
Other universities	Australian Catholic University	Multi-state
	Charles Sturt University	NSW
	Deakin University	Vic
	Edith Cowan University	WA
	Macquarie University	NSW
	Swinburne University of Technology	Vic
	University of Canberra	ACT
	University of Tasmania	Tas
	University of Wollongong	NSW
	University of Western Sydney	NSW
	Victoria University	Vic

(continued)

Table A1.1 (continued): List of Australian universities

	University	State/territory
Table B providers		
	Bond University	Qld
	University of Divinity	Vic
	University of Notre Dame	WA

Appendix B: Examples of strategies currently used by universities to improve equity

Table A3.1: Examples of current strategies used by universities to improve equity

University	Strategies for students from all equity groups	Specific strategies for Indigenous students
Group of 8		
Australian National University	• Equity scholarships • Bonus ATAR points for regional school-leavers and students from eligible Educational Access Scheme schools • Support services	• Scholarships • Support services (Indigenous higher education centre)
Monash University	• Scholarships • School and community engagement (Access Monash; Schools Access Monash) • Alternative admission pathways (Diploma of Tertiary Studies) • Special admission schemes (Monash Guarantee for students who are financially disadvantaged, come from an underrepresented school or are an Indigenous Australian; Special Entry Access Scheme for students disadvantaged by personal circumstances) • Mentoring program for Year 11 and 12 students (Gateway Scholars) • Support services • Financial grants	• Scholarships; cadetships • Bonus ATAR points • Alternative admission pathways (Indigenous Enabling Program; Indigenous non-award pathway) • Special admission schemes (Monash Guarantee) • School and community engagement (summer camp; Australian Indigenous Mentoring Experience) • Tutoring and academic skills assistance • Support services (Yulendj Indigenous Engagement Unit) • Dedicated student lounges
University of Adelaide	• Scholarships • Special admission schemes (Rural Background Entry) • Bonus ATAR points for students from eligible schools (Fairway Access Scheme) and financially disadvantaged students (Fairway Equity Scheme) • Support services	• Scholarships • University preparatory program • Alternative admission pathways (Aboriginal Access Scheme) • Support services
University of Melbourne	• Scholarships (equity; merit); bursaries • Special admission schemes (students from disadvantaged financial background and/or rural or isolated areas) • School outreach programs (Student Welfare Outreach Team) • Support services	• Scholarships • Alternative admission pathways (Access Melbourne; Bachelor of Arts (extended)) • Support services (Murrup Barak, Melbourne Institute for Indigenous Development)

(continued)

Table A3.1 (continued): Examples of current strategies used by universities to improve equity

University	Strategies for students from all equity groups	Specific strategies for Indigenous students
University of Queensland	• Equity scholarships • Special admission schemes • Bonus points on OP selection rank (UQ-Link Access) • Alternative admission pathways • Support services	• Scholarships • Alternative admission pathway (Alternative Entry)
University of Sydney	• Equity scholarships • Loans; bursaries • Alternative admission pathways (Broadway Scheme; Rural Entry Scheme) • Bonus ATAR points • Support services	• Scholarships • Alternative admission pathway (Cadigal Alternative Entry Programme) • Support centre • Tutoring and academic skills assistance
University of Western Australia	• Equity scholarships • School outreach program (Aspire UWA) • Alternative admission pathways (UWay; Broadway UWA; Fairway UWA) • Support services • Financial grants	• Scholarships • Alternative admission pathway (Provisional Entry Scheme) • School outreach and residential programs (leadership seminar; science camp; WA Certificate of Education revision) • Tutoring and academic skills assistance • Support services (School of Indigenous Studies) • Dedicated student centre and computer room
University of New South Wales	• Equity scholarships • Bonus ATAR points (UNSW ACCESS Scheme; Priority Schools Program; Country Areas Program; Smarter Schools National Partnership for Low Socio-economic Status School communities program) • School outreach programs • Support services	• Scholarships; cadetships • Alternative admission pathway (UNSW Indigenous Admission Scheme) • University preparatory programs (Nura Gili Pre-programs in business, education, law, medicine and social work; enabling programs) • Residential programs (Indigenous Winter School; Indigenous Spring Forum)
Australian Technology Network		
Curtin University of Technology	• Equity scholarships • Alternative admission pathways (StepUp Entry; StepUp Bonus) • University preparatory program (UniReady Enabling Program) • Support services • Financial grants	• Scholarships • Indigenous student bridging programs

(continued)

Table A3.1 (continued): Examples of current strategies used by universities to improve equity

University	Strategies for students from all equity groups	Specific strategies for Indigenous students
Queensland University of Technology	• Equity scholarships • Bonus points on OP selection rank (Q-Step Scheme) • Alternative admission pathways • School outreach program • Support services • Financial grants	• Scholarships; bursaries • Computer scholarship • Support services
RMIT University	• Equity scholarships • Alternative admission pathway (Special Entry Access Scheme) • Support services	• Scholarships • Alternative admission pathways (Aboriginal and Torres Strait Islander Priority Access) • Support services
University of South Australia	• Equity scholarships • Bonus ATAR points for students from underrepresented, regional or remote schools • School outreach program • University preparatory programs (Foundation Studies program) • Support services • Financial grants	• Scholarships • Alternative admission pathways (Indigenous special entry) • University preparation sessions • Support services • Tutoring and academic skills assistance
University of Technology, Sydney	• Equity scholarships • School outreach program (U@Uni) • ATAR concessions (InpUTS Educational Access Scheme) • Alternative admission pathways (UTS Principals Recommendation Scheme) • Support services • Financial grants	• Scholarships • Alternative admission pathway (Jumbunna Direct Entry Program) • Support services
Innovative Research Universities		
Charles Darwin University	• Scholarships; bursaries • Alternative admission pathways • Bonus ATAR points for NT school leavers and school leavers from a rural or remote area bordering NT • University preparatory programs (Tertiary Enabling Program) • Support services	• Scholarships • Alternative admission pathway (Indigenous Alternative Entry Program) • Support services (School of Australian Indigenous Knowledge Systems)

(continued)

Table A3.1 (continued): Examples of current strategies used by universities to improve equity

University	Strategies for students from all equity groups	Specific strategies for Indigenous students
Flinders University	• Equity scholarships; cadetships • Bonus ATAR points • Alternative admission pathways • University preparatory program (Foundation Studies program) • Support services	• Scholarships; cadetships; internships • Alternative admission pathway (Indigenous Admissions Scheme) • Orientation program • Tutoring and academic skills assistance • Support services
Griffith University	• Scholarships • Special admission schemes (regional preference) • Alternative admission pathways (Educational Access Scheme; Uni-Start) • School and community outreach activities (Uni-Reach) • First-year student mentoring program (Uni-Key) • Support services	• Scholarships • Special admission scheme (GUMURRII Admissions Scheme) • University preparatory program ('Hand Up' Tertiary Preparation Program) • Support services
James Cook University	• Scholarships • Support services • Financial grants	• Scholarships • Support services
La Trobe University	• Equity scholarships • Bonus ATAR points • Special admission schemes (Schools Access La Trobe) • University preparatory programs (Tertiary Enabling Program) • Support services • Financial grants	• Scholarships • Support services
Murdoch University	• Equity scholarships • Special admission schemes • University preparatory programs (OnTrack; Murdoch University Preparation Course) • Support services	• Scholarships • Alternative admission pathway (K-track; Kulbardi Wangkiny – Pre-Media) • Tutoring and academic skills assistance • Support services
University of Newcastle	• Equity scholarships • Bonus ATAR points for students from regional schools • School and community outreach programs (AIM High) • University preparatory programs (UoN Prep Bridging Course) • Support services	• Scholarships • Alternative admission pathway (Yapug Aboriginal and Torres Strait Islander Enabling Program) • School outreach program (School 2 University) • Support services

(continued)

Table A3.1 (continued): Examples of current strategies used by universities to improve equity

University	Strategies for students from all equity groups	Specific strategies for Indigenous students
Regional Universities Network		
Central Queensland University	• Equity scholarships • Bonus points on OP selection rank for regional students and for school leavers from participating schools (CQUniConnect) • Special admission schemes (Educational Access Scheme) • Bookshop vouchers • University preparatory program (Student Readiness program) • Support services • Financial grants	• Scholarships • University preparatory program (Nulloo Yumbah Tertiary Entry Program) • Support services (Office of Indigenous Engagement)
Southern Cross University	• Equity scholarships • Special admission schemes (Educational Access Scheme) • Alternative admission pathways • University preparatory program (Preparing for Success) • Support services	• Scholarships • Alternative admission pathway (Indigenous Testing and Assessment Program) • Community outreach (Uni-Bound program) • School outreach program (Australian Indigenous Mentoring Experience) • Support services (Gnibi College of Indigenous Australian Peoples; Indigenous Australian Support Services)
University of Ballarat	• Equity scholarships • Special admission schemes (Special Entry Access Scheme) • School outreach activities (Regional Schools Outreach Program) • University preparatory program (Foundation Access Studies Program) • Support services	• Scholarships • Support services (Aboriginal Education Centre)
University of New England	• Equity scholarships • Special admission schemes (Educational Access Scheme) • Bonus ATAR points for applicants from regional, rural and remote locations • University preparatory program (Pathways Enabling Course) • Support services	• Scholarships • Alternative admission pathway (Oorala Internal Selection Program) • University preparatory program (TRACKS) • Support services
University of Southern Queensland	• Equity scholarships • Alternative admission pathway (Tertiary Preparation Program) • Support services • Financial grants	• Scholarships; bursaries • Alternative admission pathway (Indigenous Higher Education Pathways Program) • Tutoring and academic skills assistance • Support services

(continued)

Table A3.1 (continued): Examples of current strategies used by universities to improve equity

University	Strategies for students from all equity groups	Specific strategies for Indigenous students
University of the Sunshine Coast	• Equity scholarships • Special admission scheme (Access USC) • Bonus points on OP selection rank for school leavers residing or attending school in an *Outer regional*, *Remote* or *Very remote* area (Regional Preference Scheme) • Support services	• Scholarships; cadetships • Alternative admission pathway (Indigenous Alternative Entry Scheme) • University preparatory program (Tertiary Preparation Pathway) • Tutoring and academic skills assistance • Dedicated student centre (Buranga Centre) • Support services
Other universities		
Australian Catholic University	• Equity scholarships • Bonus ATAR points for students from eligible schools, regional areas and geographically strategic areas (Access ACU) • Special admission schemes (Special Entry Access Schemes) • Alternative admission pathways (writing and maths workshops; Education Reconnect; Principal's Recommendation Program) • School and community engagement (ACUgate) • Support services	• Scholarships; bursaries • Alternative admission pathway (Aboriginal and Torres Strait Islander Special Entry Scheme) • School outreach programs (Come to Dinner) • Tutoring and academic skills assistance • Support services
Charles Sturt University	• Equity scholarships • Bonus ATAR points for regional school leavers (Regional Bonus Point program) • Special admission schemes (Special Entry Access Schemes) • University preparatory program (Diploma of General Studies) • Support services • Financial grants	• Scholarships • Alternative admission pathway (Darrambal skills assessment program) • Tutoring and academic skills assistance • Support services
Deakin University	• Equity scholarships • Special admission schemes (Deakin Access and Equity Program) • Bonus ATAR points for rural and regional students (Rural and Regional Bonus Scheme) • Alternative admission pathways • School outreach programs (Access Express; Deakin Engagement and Access Program) • Support services • Financial grants	• Scholarships; bursaries • Tutoring and academic skills assistance • Support services (Institute of Koori Education)

(continued)

Table A3.1 (continued): Examples of current strategies used by universities to improve equity

University	Strategies for students from all equity groups	Specific strategies for Indigenous students
Edith Cowan University	• Equity scholarships • University preparatory programs (University Preparation Course) • Support services	• Scholarships • Alternative admission pathway (Indigenous University Orientation Course) • Support services (Kurongkurl Katitjin Centre for Indigenous Australian Education and Research)
Federation University Australia	• Equity scholarships • Bonus ATAR points for students from regional and remote backgrounds • Special admission schemes (Special Entry Access Schemes) • Alternative admission pathways (Regional Education Entry Program; Foundation Access Studies program) • School outreach program (Regional Schools Outreach Program) • Support services	• Scholarships • Tutoring and academic skills assistance • Support services (Aboriginal Education Centre) • Dedicated computer lounge
Macquarie University	• Equity scholarships • Bonus ATAR points for school leavers from rural and regional areas (Rural Bonus Scheme) • Special admission schemes (Educational Access Scheme) • Alternative admission pathway (*Next step* program) • Support services	• Scholarships; cadetships • Alternative admission pathway (Warawara Alternative Entry Program) • Tutoring and academic skills assistance • Support services • Dedicated computer lab
Swinburne University of Technology	• Equity scholarships • Special admission schemes (Special Entry Access Schemes) • University preparatory program (Course in Tertiary Transition Skills) • Support services • Financial grants	• Scholarships • Tutoring and academic skills assistance • Support services
University of Canberra	• Equity scholarships • Bonus ATAR points for students from disadvantaged regional and remote schools (Regional Bonus Points Scheme) • Special admission schemes (Educational Access Scheme) • Alternative admission pathway (Regional Pathways program) • School outreach programs (*Aspire UC*; Student-for-a-day program) • Support services	• Scholarships • Bonus ATAR points • University preparatory programs (Advancement Programs; Foundation Program) • Tutoring and academic skills assistance • Support services (Ngunnawal Indigenous Higher Education Centre) • Dedicated computer lab

(continued)

Table A3.1 (continued): Examples of current strategies used by universities to improve equity

University	Strategies for students from all equity groups	Specific strategies for Indigenous students
University of Tasmania	• Equity scholarships; bursaries • University preparatory program (University Preparation Program; UniStart; Bachelor of General Studies) • Support services	• Scholarships • University preparatory programs (Murina Preparation Pathway) • School outreach activities (Karni Mapali mentoring program for Year 11 and 12 students) • Tutoring and academic skills assistance • Support services (Riawunna Centre)
University of Wollongong	• Equity scholarships • Bonus ATAR points for regional school leavers or applicants living in surrounding areas • Special admission schemes (Educational Access Scheme) • Alternative admission pathway (Special Tertiary Entrance Program) • Support services • Financial grants	• Scholarships • Alternative admission pathway (Alternative Admissions Program) • School outreach program (Australian Indigenous Mentoring Experience) • Orientation program (iStart@Woolyungah) • Tutoring and academic skills assistance • Support services (Woolyungah Indigenous Centre)
University of Western Sydney	• Equity scholarships • Bonus ATAR points for regional school leavers • Alternative admission pathway (UWS College) • Support services	• Scholarships • Alternative admission pathway (Badanami Alternative Entry program) • Support services (Badanami Centre for Indigenous Education) • Dedicated computer lab
Victoria University	• Equity scholarships • Bonus ATAR points for students from schools in Western Region council areas • Special admission schemes (Special Entry Access Schemes) • Support services	• Scholarships • Alternative admission pathway (direct application to university) • Support services (Moondani Balluk Academic Unit)

Note: Examples of strategies included in this table were sourced from university websites. The table is not intended to be fully inclusive of each university's equity programs and activities.

Appendix C: Potential data sources

Table A4.1: Summary of potential data sources

Source	Data type	Frequency	Years available	Scope	Pros	Cons
Survey of Education and Work (SEW)	Survey	Annual	Since 1964	Transition from education to work and current labour force and demographic characteristics for the civilian population aged 15-64 years and persons aged 65–74 years who are in the labour force or marginally attached to the labour force. For the first 17 surveys it was titled 'Survey of Leavers from Schools, Universities and Other Educational Institutions'. Changes in the amount and type of data collected supported a naming change in May 1981 to the title 'Transition from Education to Work'.	Collects wide range of data about education and about pathways chosen post-school and into employment. Will allow comparison between different pathways, for different SES levels. Allows assessment of outcomes after attaining different levels of education Collects a number of data items that can be used to measure SES.	Although data available since 1964, the scope has changed a number of times, and there are a number of breaks in the time series
Survey of Education and Training (SET)	Survey	4-yearly	1989, 1993, 1997, 2001, 2005, 2009 (final)	Range of key indicators relating to educational attainment and participation in education and training activities for the population. The 2009 SET covers urban and rural areas across all States and Territories, and includes residents of private dwellings aged 15–74 years. Very remote areas of Australia are excluded, as are persons in institutions such as hospitals and nursing homes and special dwellings such as hotels and boarding houses. The focus is on the education and training activities of persons in the population of interest (people aged 15–64, and persons aged 65–74 years who are either in the labour force or marginally attached to the labour force).	Contains more comprehensive data than the SEW on income, education history, and health and disability.	Data available only every 4 years. Last data collection was 2009. Excludes very remote areas.

(continued)

Table A4.1 (continued): Summary of potential data sources

Source	Data type	Frequency	Years available	Scope	Pros	Cons
Australian Graduate Survey – Graduate Destination Survey (AGS-GDS)	Survey	Annual; conducted around 2 reference dates following graduate conferrals (end October and end April).	Since 1972	Collects information about graduate employment outcomes and previous employment; continuing study and work-seeking status; work-seeking behaviour; past education; and key respondent characteristics (e.g. recent qualifications, residency status, and so forth). The annual response rate for the domestic graduate population is generally between 60 and 65%.	Possible to disaggregate responses to items by university Includes several variables to look at equity groups (e.g. disability identifier, main language spoken at home, year of arrival in Australia). Collects information about graduate outcomes (e.g. employment) Annual data collection, which can help measure changes over time.	The AGS is only sent to graduates of a program of study, thus non-graduating students are not surveyed and universities are not informed about the perceptions of currently enrolled students Response bias.
Australian Graduate Survey - Course Experience Questionnaire (AGS-CEQ)	Survey	Annual	Since 1972	Intended to probe key elements of the university learning process and, in doing so, obtain data on the quality of teaching and courses.	Possible to disaggregate responses to items by university Includes several variables to look at equity groups (e.g. disability identifier, main language spoken at home, year of arrival in Australia). Annual data collection, which can help measure changes over time.	The AGS is only sent to graduates of a program of study, thus non-graduating students are not surveyed and universities are not informed about the perceptions of currently enrolled students Response bias.
Graduate Pathways Survey (GPS) (ACER)	Survey	One-off	2008	Investigates graduates' employment outcomes five years after completion of a bachelor's degree.	A range of variables available to assess SES and membership in equity groups Survey includes data on both educational contexts (e.g. field of education, average overall grade, satisfaction with study) and post-graduation activities (e.g. work-seeking activity, occupation, annual salary, work satisfaction).	One-off survey

(continued)

Table A4.1 (continued): Summary of potential data sources

Source	Data type	Frequency	Years available	Scope	Pros	Cons
Longitudinal Survey of Australian Youth (LSAY)	Longitudinal survey	Annual data for 5 cohorts. Each cohort is contacted yearly over a 10 year period.	Five cohorts beginning: 1995, 1998, 2003, 2006, 2009, 2014.	Survey participants (collectively known as a 'cohort') enter the study when they turn 15 years, or as was the case in earlier studies, when they were in Year 9. LSAY provides a rich source of information to help better understand young people and their transitions from school to post-school destinations, as well as exploring social outcomes, such as wellbeing. Information collected as part of LSAY covers a wide range of school and post-school topics, including student achievement, student aspirations, school retention, social background, attitudes to school, work experiences and what students are doing when they leave school. This includes vocational and higher education, employment, job seeking activity, and satisfaction with various aspects of their lives. Since 2003, the initial survey wave has been integrated with the Organisation for Economic Co-operation and Development (OECD) Programme for International Student Assessment (PISA). Over 10,000 students start out in each cohort.	A range of variables can be used to comprehensively assess different pathways for youth from different SES and equity backgrounds. This can allow comparisons between characteristics of students who did and did not attend university. Wide range of data items covering social, educational, demographic background (of the surveyed youth, and of their families), through to later outcomes in employment. Collects data that would not be collected administratively with regard to admissions, such as university course preferences, whether they were offered a place, whether they accepted the place, whether received their first preference of university course, reasons for deferring university studies, and so forth.	Attrition bias.

(continued)

Table A4.1 (continued): Summary of potential data sources

Source	Data type	Frequency	Years available	Scope	Pros	Cons
General Social Survey (GSS)	Survey	4-yearly	2002, 2006, 2010, 2014.	The 2010 GSS collected information from August to November 2010 from 15,028 private dwellings throughout non-remote areas of Australia. The sample was designed to provide national and state level estimates, recognising state/territory responsibilities in many areas of social concern. Information was obtained from one person aged 18 years or over in the selected household. The GSS is designed to enable analysis of the interrelationships in social circumstances and outcomes, including the exploration of multiple advantage and disadvantage. The survey provides information on people's health, family relationships, social and community involvement, education, employment, income and financial stress, assets and liabilities, housing and mobility, crime and safety, transport, attendance at culture and leisure venues, and sports attendance and participation.	Contains data on: • indexes of relative socio-economic disadvantage to compare SES groups • a number of equity groups (e.g. remoteness groups, main language, country of birth) • a range of factors related to disadvantage which can affect access to higher education • education, and access to education, including 'reasons did not study although wanted to' and 'main reasons did not study although wanted to'.	Data available only every 4 years

(continued)

Table A4.1 (continued): Summary of potential data sources

Source	Data type	Frequency	Years available	Scope	Pros	Cons
Internal university information systems	Administrative	Annual	Ongoing	The scope varies across universities. May include information on applications, scholarships, students, staff, finance, research, and other items (such as international partnerships, physical space, organisational performance, and so on).	Data on all students attending university can be analysed. Complete and accurate source of data on rates of completions, attrition, retention, and course preferences and offers. This is particularly useful given that many indicators of performance in equity of access pertain to data collected in university administrative collections (e.g. retention, attainment, completions and so forth).	Data is not available publicly. Considerable time and effort to request data directly from all universities in Australia. Data would need to be standardised.
University Applications and Offers Data Collection	Administrative	Annual	Since 2008	This collection has been designed as a 'national minimum dataset' for university applications, offers and acceptances. It is administered by Education. It was established to provide comparable and comprehensive data on applications, offers and acceptances for university places. The data collection is composed of individual records of applications by domestic applicants during the start of year admissions process for Commonwealth supported places in higher education undergraduate award courses. Records of offers made by universities and acceptances of those offers by students are also included in the collection.	Large numbers to compare different groups. Complete administrative data submitted annually. Maximal use is made of existing national code set standards (e.g. the Higher Education Student Data Collection and the ABS Australian Standard Classifications). This means that there is consistency between different universities in the methods used to collect data. Data from one source rather than from individual universities, which means saving time/cost. Collects tertiary entrance score. Collects 'basis for admission to current course' (e.g. mature age special entry provisions)	Data only available for people who were offered positions, and therefore will not capture information on those who applied but did not receive an offer. This is an issue with respect to measuring equity in access to higher education.

(continued)

Table A4.1 (continued): Summary of potential data sources

Source	Data type	Frequency	Years available	Scope	Pros	Cons
Higher Education Student Data Collection	Administrative	Annual	Ongoing	The Higher Education Student Data Collection encompasses enrolments, equivalent full time student load (unit of study data) and completions, and is reported by all higher education providers approved by *the Higher Education Support Act 2003*.	Large numbers to compare different groups. Data sourced from one source rather than from individual universities, which means saving time/cost. Collects tertiary entrance score.	Data only available for people who were offered positions, and therefore will not capture information on those who applied but did not receive an offer. Universities may hold data of interest that is not submitted to Education.
Higher Education Staff Data Collection	Administrative	Annual	Ongoing	Collects data on actual casual, full-time and fractional full time, and estimated casual staff at higher education institutions, and is reported by all higher education providers approved by the *Higher Education Support Act 2003*.	Holds data on staff hired from different equity backgrounds Complete administrative data submitted annually to Education.	
Jurisdictional university admissions centres	Administrative	Annual	Varies by state/ territory	Administrative data collected on people who apply to University courses through state and territory university admissions centres State and territory admissions centres: Universities Admissions Centre (NSW/ACT) Victorian Tertiary Admissions Centre South Australian Tertiary Admissions Centre Tertiary Institutions Service Centre (WA) Queensland Tertiary Admissions Centre University of Tasmania Charles Darwin University (NT).	Complete and accurate source of data, which can be used to analyse course applications, offers and acceptances.	

(continued)

Table A4.1 (continued): Summary of potential data sources

Source	Data type	Frequency	Years available	Scope	Pros	Cons
National Aboriginal and Torres Strait Islander Social Survey (NATSISS)	Survey	6-yearly	2002, 2008 Next round in 2014	The 2008 NATSISS provides information on a range of demographic, social, environmental and economic indicators, including personal and household characteristics; geography; language and cultural activities; social networks and support; health and disability; education; employment; financial stress; income; transport; personal safety; and housing. The survey includes Aboriginal and Torres Strait Islander people aged 15 years and over who are usual residents in selected private dwellings. The NATSISS is conducted in urban, rural and remote areas across Australia.	Provides data specifically for Indigenous Australians, which can be used to assess levels of access among this equity group Contains data on: • a number of equity groups (e.g. remoteness groups, main language) • indexes of relative socio-economic disadvantage to compare SES groups • a range of factors related to disadvantage which can affect access to higher education • education, and access to education, including whether the interviewee wanted to study for an educational qualification in last 12 months; reason did not study for (an/another) educational qualification in last 12 months; whether has future educational intentions; reasons for future educational intentions.	Data available only every 6 years.
Centrelink payments data—ABSTUDY (Aboriginal and Torres Strait Islander Study Assistance Scheme)	Administrative	Ongoing; financial year reporting	ABSTUDY available since 1969	Welfare payment for Indigenous Australians undergoing some form of study. All Indigenous students at secondary or tertiary institutions, as well as those studying by correspondence, and primary students who turned 14 prior to 1 January of their current year of study. ABSTUDY is tailored according to income tests, and the status of partners, guardians, and dependent children.	These data would be useful to assess the financial support that Indigenous students receive, as financial issues can influence their ability to access to higher education, and their ability to complete courses. ABSTUDY grants travel allowances for students studying away from home, therefore data may be available for students within both the Aboriginal and Torres Strait Islander and regional/remote equity groups.	May be difficult to obtain data.

(continued)

Table A4.1 (continued): Summary of potential data sources

Source	Data type	Frequency	Years available	Scope	Pros	Cons
Centrelink payments data—Austudy	Administrative	Ongoing; financial year reporting	Since July 1998	Austudy Payment was originally known as the AUSTUDY Scheme, an all-ages study allowance, but since the introduction of Youth Allowance (see below) it has been reserved for the over 25s. To qualify, one must be an Australian resident, over 25, and studying full-time at an approved education institution. However, students who were receiving Youth Allowance prior to turning 25 and are still pursuing the same course of study continue to receive Youth Allowance until they finish (or otherwise terminate) their course. Unlike Youth Allowance, Austudy customers are considered to be independent. From 1 April 2010, eligible higher education Austudy Payment recipients became eligible for a Student Start-Up Scholarship for each semester of higher education study, at an approved higher education institution in Australia. This scholarship has not been made available to students studying Vocational Education or Secondary School level courses.	These data would be useful to assess the financial support that students from various equity groups are receiving (particularly those from low SES backgrounds), as financial issues can influence their ability to access to higher education, and their ability to complete courses.	May be difficult to obtain data.

(continued)

Table A4.1 (continued): Summary of potential data sources

Source	Data type	Frequency	Years available	Scope	Pros	Cons
Centrelink payments data—Youth Allowance	Administrative	Ongoing; financial year reporting	Since July 1998	Youth Allowance is an income support payment available to full-time students and Australian Apprentices aged 16–24, and to job seekers and those undertaking a combination of other activities leading to employment aged 16–20. Youth Allowance recipients are considered to either be dependent on caregiver(s), or independent. The underlying philosophy of Youth Allowance is that legal guardians are responsible for supporting their children where they have the means if that young person has not lived independently from them.	These data would be useful in assessing the financial support that students from various equity groups are receiving (particularly those from low SES backgrounds), as financial issues can influence their ability to access to higher education, and their ability to complete courses.	May be difficult to obtain data.
ABS Census of Population and Housing	Census	5-yearly	Censuses were held in 1901, 1911, 1921, 1933, 1947, and 1954; the 5-year period was introduced in 1961.	The Census of Population and Housing counts all people who spend Census night within Australia and its external and internal territories other than Norfolk Island, with the exception of foreign diplomats and their families. Its objective is to accurately measure the number and key characteristics of people who are in Australia on Census night, and of the dwellings in which they live. This information provides a reliable basis for estimating the population of each of the states, territories and local government areas.	Covers all people in Australia on Census night, and can be used to estimate the number of people in the population of interest (e.g. the number of school aged children in Australia, the number of 18–24 year olds, and so forth). Collects data about education and qualifications.	

(continued)

Table A4.1 (continued): Summary of potential data sources

Source	Data type	Frequency	Years available	Scope	Pros	Cons
Institutional Performance Portfolios Information Collection (IPPIC)	Census of Table A and Table B providers	Annual	2009 - 2013	The IPPIC supplements information collected for the IPP that assesses universities in seven areas: higher education provision; student experience; student outcomes; community, equity and access; research and research training; resources and infrastructure; staffing capabilities. The IPPIC is also used for comparing benchmark groups; monitoring student load planning; reporting on financial planning and capital asset management; monitoring community engagement and equity programs; reporting to Parliament on Indigenous education outcomes; and monitoring research activities, training and performance. Regarding the years of data available, the IPPIC was known as Institution Assessment Framework Information Collection since 2004, which replaced the Educational Profiles Data Collection.	The data can be used to help monitor community engagement and equity programs including, but not limited to, those covered in institutions' reporting on HEPPP. The IPPIC includes an equity report, which collects data about institutional equity focus groups, programs and scholarships. It also collects data about HEPPP-funded activities for low SES students, Disability Support Program-funded activities, and other activities for each of the other equity groups. This includes information about the activities; the costs and resources used for each of these; and the outcomes from each activity (both qualitative and quantitative).	Data are both quantitative and qualitative. It may be difficult to develop indicators using qualitative data, and different universities may report in different ways. The IPPIC ceased in 2013.
National Schools Attendance Collection (NSAC)	Administrative	Annual	Ongoing	The Ministerial Council for Education, Early Childhood Development and Youth Affairs (MCEECDYA) NSAC is collected across all states and territories for full-time students in Years 1 to 10.	Data can be used to analyse school attendance rates among school-aged children, which is a precursor to/predictor of attending higher education courses.	

(continued)

Table A4.1 (continued): Summary of potential data sources

Source	Data type	Frequency	Years available	Scope	Pros	Cons
Australasian Survey of Student Engagement (AUSSE)	Survey	Annual	Since 2007	The AUSSE is run by the Australian Council for Educational Research (ACER) in conjunction with participating higher education institutions. Data from the AUSSE provides information on the time and effort students devote to educationally purposeful activities and on students' perceptions of the quality of other aspects of their university experience.	The information collected by the AUSSE can be used by higher education institutions to improve student outcomes; manage and monitor resources, programs and services; and help identify how to attract, and importantly, retain students.	
Australian Health Survey (AHS)/ Australian Aboriginal and Torres Strait Islander Health Survey (AATSIHS)/ National Health Survey (NHS)	Survey	3-yearly (approx)	1995, 2001, 2004–05, 2007–08, 2011–13	The 2011-13 AHS collected information by face-to-face interview from usual residents of private dwellings in urban and rural areas of Australia, covering about 97% of the people living in Australia. Persons in scope of the survey were those identified by an adult within each sampled private dwelling as a usual resident of that dwelling. Private dwellings are houses, flats, home units, caravans, garages, tents and other structures being used as a place of residence at the time of the survey. The Australian Aboriginal and Torres Strait Islander Health Survey (AATSIHS) was collected as part of the AHS.	Data can be used to analyse health and well-being, which is a precursor to/predictor of attending higher education courses.	The AHS does not include remote areas, although the AATSIHS does.

Appendix D: Map of framework domains

Table A4.2: Comparison of frameworks across key domains—individual factors

Framework	Indigenous status	Education background (e.g. ATAR score, Year 12 attainment)	Gender	Disability	Age (mature students)	Literacy & numeracy	Ethnicity	Aspiration and attitudes towards higher education
Review of Australian higher education	✓							
Key measures for HEPPP planning and evaluation (Monash University)		✓						
Framework for Evaluation of Equity Initiatives (Group of 8)			✓					
Widening Participation in Higher Education for People from Low SES Backgrounds (Deakin University)				✓	✓			
National Plan for Equity of Access to Higher Education 2008-2013 (Ireland)							✓	
Accountability Framework for California Colleges and Universities (USA)	✓	✓				✓		
Overcoming Indigenous Disadvantage		✓				✓		
National Education Agreement	✓	✓		✓				
National Agreement for Skills and Workforce Development	✓	✓						
National Indigenous Reform Agreement	✓					✓		
National Partnership Agreement on Low Socio-Economic Status School Communities								

(continued)

Table A4.2 (continued): Comparison of frameworks across key domains—individual factors

Framework	Indigenous status	Education background (e.g. ATAR score, Year 12 attainment)	Gender	Disability	Age (mature students)	Literacy & numeracy	Ethnicity	Aspiration and attitudes towards higher education
DEEWR Performance funding: Administrative guidelines	✓			✓			✓ (NESB)	
Review of participation in higher education of people from low socioeconomic backgrounds and Indigenous people (Universities Australia)	✓	✓					✓ (Race as a measure of SES in USA)	✓
Institution Performance Portfolio (UWA)	✓		✓ (Women in non-traditional areas)	✓	✓		✓ (NESB)	
Advancing the National Higher Education Equity Framework	✓		✓ (Women in non-traditional areas)	✓			✓ (NESB)	
Macquarie@50							✓ (NESB)	
Institutional Assessment Framework (Swinburne University)	✓		✓ (Women in non-traditional areas)	✓				
Our universities: backing Australia's future	✓		✓ (Women in non-traditional areas)	✓			✓ (NESB)	

(continued)

Table A4.2 (continued): Comparison of frameworks across key domains—individual factors

Framework	Indigenous status	Education background (e.g. ATAR score, Year 12 attainment)	Gender	Disability	Age (mature students)	Literacy & numeracy	Ethnicity	Aspiration and attitudes towards higher education
Charles Darwin University - Institutional Assessment Framework equity update	✓			✓			✓ (NESB)	
Institutional Performance Portfolio information collection: instructions	✓		✓	✓			✓ (NESB)	
Development of performance measurement instruments in higher education		✓						
Aboriginal and Torres Strait Islander Health Performance Framework (HPF)	✓	✓				✓		

Table A4.3: Comparison of frameworks across key domains—contextual factors

Framework	SES	Remoteness	Education background (e.g. school sector, support from teachers, early childhood education)	Parental support	Parental education level	Parental occupation	Family income	Cultural isolation & prejudice
Review of Australian Higher Education	✓	✓						
Key measures for HEPPP planning and evaluation (Monash University)	✓	✓	✓					
Framework for Evaluation of Equity Initiatives (Group of 8)								
Widening Participation in Higher Education for People from Low SES Backgrounds (Deakin University)				✓				
National Plan for Equity of Access to Higher Education 2008-2013 (Ireland)	✓							
Accountability Framework for California Colleges and Universities (USA)	✓							
Overcoming Indigenous Disadvantage		✓	✓					
National Education Agreement								
National Agreement for Skills and Workforce Development			✓					
National Indigenous Reform Agreement								
National Partnership Agreement on Low Socio-Economic Status School Communities	✓							

(continued)

Table A4.3 (continued): Comparison of frameworks across key domains—contextual factors

Framework	SES	Remoteness	Education background (e.g. school sector, support from teachers, early childhood education)	Parental support	Parental education level	Parental occupation	Family income	Cultural isolation & prejudice
DEEWR Performance funding: Administrative guidelines	✓	✓						
Review of participation in higher education of people from low socioeconomic backgrounds and Indigenous people (Universities Australia)	✓	✓	✓		✓	✓	✓	✓
Institution Performance Portfolio (UWA)	✓	✓						
Advancing the National Higher Education Equity Framework	✓	✓						
Macquarie@50	✓							
Institutional Assessment Framework (Swinburne University)	✓	✓						
Our universities: backing Australia's future	✓	✓						
Charles Darwin University - Institutional Assessment Framework equity update	✓	✓						
Institutional Performance Portfolio information collection: instructions	✓	✓						
Development of performance measurement instruments in higher education								
Aboriginal and Torres Strait Islander Health Performance Framework (HPF)	✓	✓						

Table A4.4: Comparison of frameworks across key domains—organisational factors

Framework	Student support and engagement (from university staff)	Student support (financial)	Targeted outreach and community engagement/ partnerships	Relationships between unis and schools	Admission pathways and processes	Research into equity and social inclusion in HE	Flexible learning opportunities
Review of Australian Higher Education							
Key measures for HEPPP planning and evaluation (Monash University)					✓		
Framework for Evaluation of Equity Initiatives (Group of 8)	✓	✓	✓			✓	
Widening Participation in Higher Education for People from Low SES Backgrounds (Deakin University)	✓		✓		✓		
National Plan for Equity of Access to Higher Education 2008-2013 (Ireland)					✓		✓
Accountability Framework for California Colleges and Universities (USA)	✓						
Overcoming Indigenous Disadvantage							
National Education Agreement							
National Agreement for Skills and Workforce Development							
National Indigenous Reform Agreement							
National Partnership Agreement on Low Socio-Economic Status School Communities							
DEEWR Performance funding: Administrative guidelines							

(continued)

Table A4.4: (continued) Comparison of frameworks across key domains—organisational factors

Framework	Student support and engagement (from university staff)	Student support (financial)	Targeted outreach and community engagement/ partnerships	Relationships between unis and schools	Admission pathways and processes	Research into equity and social inclusion in HE	Flexible learning opportunities
Review of participation in higher education of people from low socioeconomic backgrounds and Indigenous people (Universities Australia)	✓				✓		
Institution Performance Portfolio (UWA)		✓	✓				
Advancing the National Higher Education Equity Framework	✓	✓	✓		✓		✓
Macquarie@50		✓	✓				✓
Institutional Assessment Framework (Swinburne University)	✓	✓					
Our universities: backing Australia's future		✓					
Charles Darwin University - Institutional Assessment Framework Equity update		✓					
Institutional Performance Portfolio information collection: Instructions		✓	✓				
Development of performance measurement instruments in higher education	✓				✓		
Aboriginal and Torres Strait Islander Health Performance Framework (HPF)							

Appendix E: Summary of indicators in existing frameworks

Table A4.5: Summary of performance indicators in existing frameworks

Framework	Performance indicator (general)	Specific targets/measures	Data sources (if specified)
National Education Agreement	Successful transition from school to further study	• Proportion of 15–19 year olds in full-time education or training, in full-time work, or both in part-time work and part-time education or training • Proportion of 20–24 year olds in full-time education or training, in full-time work, or both in part-time work and part-time education or training • Proportion of 15–19 year olds, who have left school, and are fully engaged in education, training or employment, by highest level of schooling • Proportion of 18–24 year olds engaged in full-time employment, education or training at or above Australian Qualifications Framework (AQF) Certificate III • Proportion of 20–24 year olds having attained at least Year 12 or equivalent or AQF Certificate II or above • Proportion of 20–24 year olds having attained at least Year 12 or equivalent or AQF Certificate III or above • Proportion of 25–29 year olds who have gained a post-secondary qualification at AQF Certificate III or above.	ABS Survey of Education and Work
National Agreement for Skills and Workforce Development	Skill levels	**Targets:** • Halve the proportion of Australians nationally aged 20-64 without qualifications at Certificate III level and above between 2009 and 2020 • Double the number of higher level qualification completions (diploma and advanced diploma) nationally between 2009 and 2020. **Measures:** • Proportion of working age population (WAP) with higher level qualifications (Certificate III and above) • Proportion of employers satisfied that training meets their needs	Australian Vocational Education and Training Management Information Statistical Standard (AVETMISS); Student Outcomes Survey (SOS); Survey of Employer Use and Views of the VET system (SEUV)
	Opportunity to develop skills	• Proportion of WAP with adequate foundation skills (literacy level 3 or above) • Proportion of WAP with or working towards a non-school AQF qualification	
	Quality of training	• Proportion of VET graduates with improved employment status after training • Proportion of VET graduates with improved education/training status after training.	
National Partnership Agreement on Low Socio-Economic Status School Communities	Successful transition from school to work and further study	• Proportion of 19-year-olds having attained at least a Year 12 or equivalent or AQF Certificate II • Proportion of young people participating in post-school education or training six months after school • Proportion of 18-24 year-olds engaged in full-time employment, education or training at or above Certificate III.	

(continued)

Table A4.5 (continued): Summary of performance indicators in existing frameworks

Framework	Performance indicator (general)	Specific targets/measures	Data sources (if specified)
National Indigenous Reform Agreement	Year 12 attainment	**Target:** Halve the gap for Indigenous people aged 20-24 in Year 12 attainment or equivalent attainment rates (by 2020). **Measure:** Proportion of 20-24 year-olds having attained at least a Year 12 or equivalent AQF Certificate II level (or above).	
	Employment outcomes	**Target:** Halve the gap in employment outcomes between Indigenous and non-Indigenous Australians within a decade (by 2018). **Measure:** Proportion of Indigenous 20-64 year olds with or working towards post school qualification in AQF Certificate III level or above.	
Overcoming Indigenous Disadvantage	Post-secondary education participation and attainment	Proportion of 20-64 year olds with a post school qualification of Certificate III or above or currently studying	NATSISS; Education
Review of Australian higher education (DEEWR)	Access rate	**Low SES students:** 20% based on current postcode methodology or representative of the population share for the new low SES measure developed **Regional students:** Proportion of the population aged 15–64 years in this group as defined by the ARIA classification in the 2006 Census **Remote students:** Proportion of the population aged 15–64 years in this group as defined by the ARIA classification in the 2006 Census **Indigenous students:** Proportion that the Indigenous population aged 15–64 years represents of the general population in this age group in the 2006 Census.	
	Completion rate	**Low SES students:** At least 95% of the rate for high SES students. **Regional students:** Same rates as for metropolitan students **Remote students:** At least 90% of that for metropolitan students **Indigenous students:** At least 90% of the rate for non-Indigenous students.	
	Retention rate	**Regional students:** Same rates as for metropolitan students **Remote students:** At least 90% of that for metropolitan students **Indigenous students:** At least 90% of the rate for non-Indigenous students.	
	Success rate	**Regional students:** Same rates as for metropolitan students **Remote students:** Same rates as for metropolitan students **Indigenous students:** At least 90% of the rate for non-Indigenous students.	

(continued)

Table A4.5 (continued): Summary of performance indicators in existing frameworks

Framework	Performance indicator (general)	Specific targets/measures	Data sources (if specified)
DEEWR performance funding: administrative and technical guidelines	Student participation	**Goal:** Increase the participation of people from low SES backgrounds in undergraduate higher education. **Measures:** Proportion of domestic undergraduates who are from a low SES background Proportion of domestic undergraduates who are from another under-represented group.	• Departmental estimates (interim low SES indicator using Higher Education Student Data Collection and Centrelink payments data) • Higher Education Student Data Collection (supplied by higher education providers) • Course Experience Questionnaire • University Experience Survey • Collegiate Learning Assessment (Australian version to be developed 2011-2013)
	Student experience	**Goal:** Improve the overall teaching, learning and support provided to students. **Measures:** Domestic undergraduate satisfaction with teaching Domestic undergraduate experience.	
	Quality of learning outcomes	**Goals:** Improve students' cognitive learning outcomes Improve universities' teaching and learning performance **Measures:** Domestic undergraduate satisfaction with generic skills Domestic undergraduate value added generic skills.	
Development of performance measurement instruments in higher education	Pre-entry	• Readiness for university study • Pathway to study.	• Australasian Survey of Student Engagement • First Year Experience Questionnaire • Higher Education Student Statistics Collection • International Student Barometer • Institution course evaluations
	University (undergraduate) study	• Readiness for university study • 1st year experience/engagement and satisfaction with study • Level of support received • University experience and engagement • Course satisfaction • Quality of teaching and learning • Student learning outcomes • Preparedness for employment and further study • Achievement of skills.	

(continued)

Table A4.5 (continued): Summary of performance indicators in existing frameworks

Framework	Performance indicator (general)	Specific targets/measures	Data sources (if specified)
Development of performance measurement instruments in higher education (continued)	Post-study	• Graduate satisfaction with study • Overall study experience • Graduate employment and further study outcomes • Continued employment and education outcomes.	• Australian Graduate Survey • Beyond Graduation Survey
Our universities: backing Australia's future	Improve outcomes for people from equity groups	• Provision of equity scholarships • Provision of specialised support • Running of outreach programs	
Advancing the National Higher Education Equity Framework[(a)]	Participation, success & retention	• By 2000, increase the success rates and retention rates of Indigenous students to levels of parity with the remainder of the higher education student population. • By 1998, develop collaborative programs with the secondary education and vocational education and training sectors to address educational disadvantage of Indigenous students at earlier levels of schooling and study to ensure better retention of these students to the upper secondary levels. • Annually, from 1996, review participation rates of Indigenous students by socio-economic status, rural background and sex. • By 1998, introduce appropriate strategies to address these areas of multiple disadvantage. • Annually, from 1996, review participation rates of female students by socio-economic status and rural background. • By 1998, introduce appropriate strategies to address these areas of multiple disadvantage. • An increase of 50%in the numbers of NESB students enrolled in generalist Arts and Science programs by 2000. • Review participation patterns of NESB students from institutions' catchment areas by field of study and country of origin and, by 2000, increase participation by at least 20% for those groups of students which are under-represented. • Annually, from 1996, review participation rates of NESB students by sex, socio-economic status, and rural background. • By 1998, introduce appropriate strategies to address these areas of multiple disadvantage. • An increase of 70% in the numbers of students with disabilities enrolled between 1996 and 1998, and 100% by 2000. • In 1996, identify base line levels of success and retention for students with disabilities.	

(continued)

(a) Only performance indicators for higher education providers are listed (government indicators not included)

Table A4.5 (continued): Summary of performance indicators in existing frameworks

Framework	Performance indicator (general)	Specific targets/measures	Data sources (if specified)
Advancing the National Higher Education Equity Framework (continued)	Participation, success & retention (continued)	• By 2000, increase these success rates and retention rates by 10%. • By 1998, increase the proportion of rural and isolated students commencing higher education courses by 20%, and by 30% by the year 2000. • By 1998, increase the proportions of students from rural and isolated areas participating in bachelor of higher degree courses by 20%. • An increase of 30% in the numbers of rural and isolated students enrolled in generalist Arts and Science programs and in Business and Health by 2000.	
	Curriculum review & change	• By 1998, inclusive curriculum developed in all institutions in those fields where Indigenous student enrolments predominate • By 2000, inclusive curriculum in all fields of study in all institutions • By 1998, review curriculum for all engineering courses and develop exemplars for female inclusive curriculum in the discipline. • By 2000, inclusive curriculum in all engineering and science programs • By 1998, develop curriculum exemplars for culturally inclusive curriculum across a range of fields of study.	
	Access	• By 1998, increase the proportion of women commencing Engineering undergraduate courses to 15%, and by 2000 to 20%. • By 1998, increase the retention rates of women in undergraduate engineering courses to at least the same rates as male students. • By 1998, increase the proportion of women commencing undergraduate courses in the fields of physical, chemical, earth sciences and mathematics to 40%, and by 2000 to 50%. • By 2000, increase the proportion of women participating in graduate coursework programs in the above fields and in business to 50%, including in those courses for which fees are charged. • By 1998, examine the educational backgrounds of students from rural and isolated areas to identify areas of admissions policy which may require review. • By 2000, necessary adjustments to admissions policies completed • By 1998, increase the proportion of low socioeconomic status students commencing higher education courses by 10%, and by 20% by the year 2000 in courses at all levels. • By 1998, all institutions introduce targeted access programs for low SES students consistent with their incidence in catchment areas.	

(continued)

Table A4.5 (continued): Summary of performance indicators in existing frameworks

Framework	Performance indicator (general)	Specific targets/measures	Data sources (if specified)
Advancing the National Higher Education Equity Framework (continued)	Participation of women in HDR	• Increase the proportion of women in higher degree research courses to parity with their proportions in undergraduate programs by 2000 in all fields.	
	Participation of women in senior academic & administrative positions at universities	• By 1997, develop appropriate classification schemes for administrative staff appointments to enable monitoring of female participation by level of appointment. • By 2000, increase the proportion of women in Level D and above positions to at least 40% in all disciplines. • By 2000, increase the proportion of women in administrative staff classifications at Level 9 and above to at least 40%.	
	Indigenous enrolment in bachelor's degree & higher level courses	• An increase of 50% in the numbers of students enrolled in bachelor's degree programs and higher level courses by 2000.	
	Graduate employment for Indigenous students	• By 2000, an increase of 50% on the proportions of graduates entering the workforce or continuing with further study.	
	Awareness of higher education opportunities among equity groups	• By 2000, all institutions with significant proportions of NESB students in their catchment areas to have developed awareness programs about higher education, preferably in collaboration with other educational agencies in their location • All regional and rural universities establish information programs on opportunities in higher education directed at students from rural and isolated areas. • Urban universities target isolated students and work with rural secondary schools and vocational education and training institutions to provide details of study options and support mechanisms for these students • All universities establish information programs on opportunities in higher education directed at low SES students within their catchment areas.	
	Removal of discouraging aspects	• By 1998, complete examination of learning environment in institutions and identify possible changes to curriculum, teaching modes or assessment which discourage students from rural backgrounds; and by 2000, implement any identified changes. • By 1998, complete examination of learning environment in institutions and identify possible changes to curriculum, teaching modes or assessment which discourage students from low SES backgrounds; and by 2000, implement any identified changes.	

(continued)

Table A4.5 (continued): Summary of performance indicators in existing frameworks

Framework	Performance indicator (general)	Specific targets/measures	Data sources (if specified)
Advancing the National Higher Education Equity Framework (continued)	Success & retention for students studying in distance mode	• By 1998, raise the retention and success rates of isolated students to levels comparable to those of urban students Institutions with large numbers of students enrolled externally develop academic strategies to reduce withdrawal rates and improve pass rates for these students.	
	Student support	• By 1998, to know the support needs for students with disabilities in the learning environment and to respond to those specific needs • By 2000, all regional universities have support schemes in place for rural and isolated students which take into account educational and social disadvantage because of their previous or current isolation. • By 1998, investigate possibilities for optimising financial support available to low SES students from other agencies and integrate with student financial support schemes. • By 2000, implementation of targeted financial and social support schemes in all universities for students from socio-economically disadvantaged backgrounds • By 2000, implementation of cooperative programs to facilitate entry and award credit for low SES students with some experience of VET sector study.	
Institutional Performance Portfolio information collection: Instructions	Indigenous education improvement	Table A providers must demonstrate that they: • have implemented strategies for improving access, participation, retention and success of Indigenous Australian students • have increased participation of Indigenous people in the provider's decision-making processes; and • have an Indigenous employment strategy.	Internal data collection
	Institutional equity focus groups	List of equity groups targeted by universities.	Internal data collection
	Institutional equity programs	List of equity and outreach programs implemented by universities.	Internal data collection
	Equity scholarships	Type of assistance available (including duration and annual financial value), target group(s) and number of students assisted.	Internal data collection
	Other activities to overcome educational disadvantage	Activity description; target group(s); activity objectives; any partnership arrangements; cost (non-HEPPP funds) and in-kind support; outcomes of the activity, including qualitative and quantitative indicators, the number of current or prospective students involved and any lessons learned.	Internal data collection

(continued)

Table A4.5 (continued): Summary of performance indicators in existing frameworks

Framework	Performance indicator (general)	Specific targets/measures	Data sources (if specified)
Framework for Evaluation of Equity Initiatives (Group of 8)	Access and participation	**Objective:** Improve access by raising the share of domestic undergraduate and postgraduate student enrolments in Go8 universities for under-represented groups, with reference to each group's national and state population share. **Measures:** • Proportion of enrolments for designated under-represented groups, with particular reference to low SES students and Indigenous students, in: − bachelor's degree courses, by year level and by field of study − courses leading to entry to the professions, including graduate level courses − honours and graduate level courses. − research higher degrees. • Proportion of enrolments for school-leavers admitted from schools with a low transition to higher education rate. • Proportion of enrolments for non-school leavers from under-represented groups. **Objective:** Improve gender balance among domestic students in identified fields of study. **Measures:** • Gender ratio among domestic students enrolled in: − bachelor's degrees by field of study, including engineering, information technology, physical sciences, veterinary science, health sciences and education; − graduate coursework programs, including graduate-level professional-entry programs, such as the health sciences of optometry, dentistry and nursing; and − research higher degrees by field of study. **Objective:** Improve financial support for students in financial need. **Measures:** • In bachelor's degrees, and where the financial assistance was awarded on the basis of financial need, the: − number and proportion of domestic students receiving financial assistance − total sum on a per capita basis awarded to domestic students. • In non-HECS liable courses, including HECS-exempt RTS places, and where the financial assistance was awarded on the basis of demonstrated financial need, the: − number and proportion of domestic students awarded fee-remission of at least 50% of course fees − number and proportion of domestic students awarded a living allowance or stipend − number and proportion of students provided with subsidised housing − total sum on a per capita basis awarded to domestic students.	Internal data

(continued)

Table A4.5 (continued): Summary of performance indicators in existing frameworks

Framework	Performance indicator (general)	Specific targets/measures	Data sources (if specified)

Framework for Evaluation of Equity Initiatives (Group of 8) (continued)	Access and participation (continued)	**Objective:** Effectiveness of diversified and expanded selection criteria for undergraduate programs for particular groups.
		Measures:
		• Proportion of students admitted to first year undergraduate courses on criteria other than or in addition to ATAR, including through:
		  − pathway programs
		  − portfolio assessment
		  − 'bonus ATAR points'
		  − first in class schemes
		  − other mechanisms'
		Objective: Provide diverse pathways into graduate-level programs for graduates from under-represented groups.
		Measures:
		• Proportion of students admitted to graduate programs from under-represented groups
		• Proportion of students admitted to graduate programs from non-traditional pathways.	

	Attainment and achievement	**Objective:** Ensure comparable rates of academic progress and success for students regardless of background. **Measures:** • Rates of retention, progression and completion for students in designated equity groups compared with other students, with particular attention to first year students • Rates of retention, progression and completion for students according to the criteria on which they were admitted • Grade distributions for students in designated equity groups compared with other students • Demographic characteristics of students identified as being at risk. **Objective:** Ensure comparable levels of engagement, integration and satisfaction for all students, regardless of background. **Measure:** • Engagement, integration and satisfaction of undergraduate and postgraduate students as measured by student experience surveys, by student background and criteria for admission to course, and with particular attention to first year students.	

(continued)

Table A4.5 (continued): Summary of performance indicators in existing frameworks

Framework	Performance indicator (general)	Specific targets/measures	Data sources (if specified)
Framework for Evaluation of Equity Initiatives (Group of 8) (continued)	Attainment and achievement (continued)	**Objective:** Ensure comparable participation in work and study placement opportunities and related programs, for all students, regardless of background. **Measure:** • Demographic characteristics of students participating in study abroad, industry placements and related programs.	
	Graduate outcomes	**Objective:** Improve the representation of graduates from designated equity groups employed in targeted professional and leadership areas. **Measures:** • Graduate outcomes data, including employment type, rate and salary by student background and criteria for admission to course • Proportion of students from designated equity groups enrolled in graduate programs, overall and by program type, including research higher degrees.	
	Research and knowledge transfer	**Objective:** Improve the research and scholarship on equity and social inclusion and assist in the translation of research findings into policy and practice. **Measures:** • Number of research grants and commissioned studies into equity and social inclusion • Number of publications on equity and social inclusion, including review reports and policy reports • Extent and range of community engagement and knowledge transfer activities • Leadership and service on boards and expert panels.	
Widening Participation in Higher Education for People from Low SES Backgrounds (Deakin University)	Access and participation	By 2020 at least 20% of all HE students come from low SES backgrounds.	
	Graduate outcomes	Low SES graduates enter high skill jobs in the labour market.	
	Partnerships with external organisations (schools, TAFEs) to improve access	• Schools, TAFEs, ACE providers in long-term strategic partnerships with Deakin University • Government resources channelled to schools, TAFEs, ACE providers and universities to support long-term pathways strategies and community engagement • Deakin University delivers 'Learning Where You Are' (to suit people's biographies and geographies). • Deakin's employment and diversity policies and practices facilitate scholarship and practices of engagement.	

(continued)

Table A4.5 (continued): Summary of performance indicators in existing frameworks

Framework	Performance indicator (general)	Specific targets/measures	Data sources (if specified)
Widening Participation in Higher Education for People from Low SES Backgrounds (Deakin University) (continued)	Partnerships with external organisations (employers) to improve graduate outcomes following study	• Employers, Geelong LLEN, G21 collaborate with Deakin to continually research current and future labour force needs • Planning outcomes fed into engagement with schools, TAFE, ACE and universities to inform low SES engagement • Enhanced capacity to collaborate in developing shared physical, social, mental and economic wellbeing	
Key measures for HEPPP planning and evaluation (Monash University)	Selection	• Preferences • Offers • Acceptances • Special Entry Access Scheme (SEAS) • TAFE pathways	
	Access	• Deferments • Returned deferments • Enrolments	
	Participation	• Attainment • Retention • Success/progress • Student experience • Discontinuations	
	Completion	• Course completions • Progression to HDR	
	Graduate outcomes	• Australian Graduate Survey > Graduate Destination Survey: − Employment − Salary • Further Study Beyond Graduation Survey: 3 years later	
Macquarie@50	Equity	• Establish scholarships and mentoring programmes by Dec 2006 • More students attending Macquarie from non-traditional backgrounds starting in 2008	

(continued)

Table A4.5 (continued): Summary of performance indicators in existing frameworks

Framework	Performance indicator (general)	Specific targets/measures	Data sources (if specified)
Review of participation in higher education of people from low socioeconomic backgrounds and Indigenous people (Universities Australia)	Access	• Rates of commencing students from the following groups: urban, rural, remote, low SES, medium SES, high SES, Indigenous.	Higher Education Student Data Collection
	Participation	• Rates of participation by university type (technical, Go8, suburban, regional) • Rates of participation by field of study • Rates of participation by course type • Secondary school completion rates • Rates of entry to VET; workforce • Student aspirations to study at university.	Higher Education Student Data Collection; DEEWR; OnTrack data set (Victorian data); Student survey
	Retention	• Retention rates of students from the following groups: urban, rural, remote, low SES, medium SES, high SES, Indigenous.	Higher Education Student Data Collection
	Success	• Success (pass) rates of students from the following groups: urban, rural, remote, low SES, medium SES, high SES, Indigenous.	Higher Education Student Data Collection
	Completion	• Completion rates of students from low SES and Indigenous background.	
	University recruitment and support strategies	• Existence of programs targeting low SES students from rural or remote Australia, low SES students from metropolitan areas, or Indigenous students • Evidence that program(s) work • Evaluation & modification of existing programs.	University questionnaire
Institutional Assessment Framework (Swinburne University)	Access	not specified	
	Participation	not specified	
	Success	not specified	
	Cultural inclusion	not specified	
	Employment of people from equity groups at the university	not specified	

(continued)

Table A4.5 (continued): Summary of performance indicators in existing frameworks

Framework	Performance indicator (general)	Specific targets/measures	Data sources (if specified)
Institution Performance Portfolio (UWA)	Access	Access rate of commencing domestic undergraduate students in the following equity groups: low SES; NESB; regional; remote; disability; Indigenous; women in engineering; women in IT; women in HDR.	Internal data collection
	Participation	Participation rate and ratio of domestic undergraduate students in the following equity groups: low SES; NESB; regional; remote; disability; Indigenous; women in engineering; women in IT; women in HDR.	Internal data collection
	Retention	Retention ratio of domestic undergraduate students in the following equity groups: low SES; NESB; regional; remote; disability; Indigenous; women in engineering; women in IT; women in HDR.	Internal data collection
	Success	Success ratio of domestic undergraduate students in the following equity groups: low SES; NESB; regional; remote; disability; Indigenous; women in engineering; women in IT; women in HDR.	Internal data collection
Charles Darwin University—Institutional Assessment Framework Equity update	Access	Access rate of commencing domestic undergraduate students in all equity groups.	Internal data collection
	Participation	Participation rate of domestic undergraduate students in all equity groups.	Internal data collection
	Retention	Retention rate of domestic undergraduate students in all equity groups.	Internal data collection
	Success	Success rate of domestic undergraduate students in all equity groups.	Internal data collection
National Plan for Equity of Access to Higher Education 2008-2013 (Ireland)	Access and participation	• A national participation rate of 72% of the relevant age cohort will be achieved by 2020 (55% in 2004). • All socio-economic groups will have entry rates of at least 54% by 2020 ('Non-manual' group at 27% and 'Semi-skilled and unskilled manual' group at 33% in 2004). (Note: SES based on parent occupation). • Mature students will comprise at least 20% of total full-time entrants by 2013 (13% in 2006). • Mature students will comprise 27% of all (full-time and part-time) entrants by 2013 (18% in 2006). • Flexible/part-time provision will increase to 17% by 2013 (7% in 2006). • Mature students will comprise at least 20% of total full-time entrants by 2013 (13% in 2006). • Mature students will comprise 27% of all (full-time and part-time) entrants by 2013 (18% in 2006). • Flexible/part-time provision will increase to 17% by 2013 (7% in 2006). • The number of students with sensory, physical and multiple disabilities in higher education will be doubled by 2013. • Non-standard entry routes to higher education will be developed so that they account for 30% of all entrants by 2013 (estimated at 24% in 2006).	
	Development of evidence base and data collection systems	not specified	

(continued)

Table A4.5 (continued): Summary of performance indicators in existing frameworks

Framework	Performance indicator (general)	Specific targets/measures	Data sources (if specified)
National Plan for Equity of Access to Higher Education 2008-2013 (Ireland) (continued)	Development and implementation of access plans and processes for evaluation	not specified	
Accountability Framework for California Colleges and Universities (USA)	Access	Access to institutions, programs, and resources.	
	Retention	Measures returning to school, transfer rates from community college to four-year institutions, and degrees awarded.	
	Excellence	Measures high achievement such as degrees awarded in competitive fields such as engineering or computer science.	
	Institutional receptivity	Indicators of institutional support (e.g. faculty composition, new appointments of faculty positions, educational administrators).	
Aboriginal and Torres Strait Islander Health Performance Framework	Literacy and numeracy	NAPLAN performance in Years 3, 5, 7, and 9.	NAPLAN
	Education outcomes for young people	Years 10 and 12 retention and attainment.	ABS National Schools Statistics Collection
	Educational participation and attainment of adults	• Highest level of school completed • Completions in VET sector • Level of educational institution currently attended.	NATSISS (ABS) National Health Survey (ABS) National Vocational Education Training Provider Collection

Appendix F: Domain/indicator map

Table A4.6: Key indicator areas mapped to framework domains

Individual factors				
Educational attainment at school	**Literacy & numeracy**	**Aspiration & attitudes towards higher education**		
ATAR score	NAPLAN scores	Intention to apply to university		
Year 12 attainment		Awareness of higher education opportunities		
Early childhood education attendance				
School attendance				
School sector attended				
Contextual factors				
Socio-economic status	**Family**	**Community**		
Parental education	Family support for higher education participation	Remoteness/proximity to university campuses		
Parental occupation	Place of residence	School encouragement to attend university		
Family income		Community attitudes toward higher education		
Student income		Cultural isolation and prejudice		
Organisational (university) factors				
Student support	**Teaching modes**	**Admission pathways and processes**	**Community engagement/ partnerships**	**Institutional receptivity**
Financial support	Availability of distance/multi-modal study	Availability of alternative admission pathways	Targeted outreach programs	Staff awareness of the needs of specific equity groups
Study support	Availability of part-time study	Provision of scholarships	Relationships with local schools	Employment of people from equity groups in university workforce
Staff engagement with students			Relationships with employers	Research and knowledge transfer in the fields of equity and social justice

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This report provides an overview of the development of a potential performance measurement framework for equity in higher education (MFE) to measure progress and gaps in access to and participation in higher education for under-represented groups (Indigenous Australians, those from low socioeconomic status areas, people who live in regional and remote areas, and people with disability). Detailed information is presented on a set of 61 possible indicators organised into 3 tiers: 23 for educational attainment and outcomes (Tier 1), 9 for precursors of higher educational attainment (Tier 2), and 29 for education system performance (Tier 3).