



NCSEHE

National Centre for Student
Equity in Higher Education



Curtin University

A FRAMEWORK FOR MEASURING EQUITY PERFORMANCE IN AUSTRALIAN HIGHER EDUCATION

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Abbreviations and Acronyms

ACARA	Australian Curriculum, Assessment and Reporting Authority
AEDC	Australian Early Development Census
AIHW	Australian Institute for Health and Welfare
ATAR	Australian Tertiary Admission Rank
ATO	Australian Taxation Office
BGS	Beyond Graduation Survey
CHESSN	Commonwealth Higher Education Student Support Number
CSHE	Centre for the Study of Higher Education
CSP	Commonwealth Supported Place
GCA	Graduate Careers Australia
GDS	Graduate Destination Survey
HDR	Higher Degree by Research
LSES	Low Socio-Economic Status
MCEETYA	Ministerial Council on Education, Employment, Training and Youth Affairs
MFE	Measurement Framework for Equity
NAPLAN	National Assessment Program – Literacy and Numeracy
NCSEHE	National Centre for Student Equity in Higher Education
NESB	Non-English speaking background
OECD	Organisation for Economic Co-operation and Development
QILT	Quality Indicators for Learning and Teaching
SES	Socio-Economic Status
STAT	Special Tertiary Admission Test
TAC	Tertiary Admission Centre
UNESCO	United Nations Educational, Scientific and Cultural Organization
WINTA	Women in Non-Traditional Areas

Executive Summary

This document describes a proposed *Equity Performance Framework for Australian Higher Education* (“the Framework”) to:

- provide a set of indicators that will allow the measurement of achievement against the Government’s commitments, targets and goals in relation to equity;
- inform policy through the provision of relevant information to support the development of evidence-based policy;
- foster informed debate through the provision of key information;
- provide a platform which will guide evaluation of programs by government and activities by Institutions; and
- inform practice within, and support equity in, the higher education system.

The Framework is hierarchical in structure and is comprised of three Tiers: Context (Pre-higher education); Performance (Higher education); and Outcomes (Post-higher education). Each Tier has related Domains and within each Domain are specific Indicators that measure higher education equity performance. Underlying each indicator are data which represents the measurement of that indicator. Figure 1 provides an overview of the structure of Tiers, Domains and Indicators.

Within and across the Tiers and Domains, a total of 24 Indicators are used to measure higher education equity performance. Overwhelmingly, Indicators rely on existing data, sourced from key (primarily educational) stakeholders who have in place rigorous and systematic data reporting processes and protocols. More specifically:

- Sixteen Indicators use existing data and data protocols;
- Six Indicators rely on existing data and protocols, however the suitability of the data (for the purposes of the Framework) is not ideal;
- One Indicator would require new data and protocols to be developed; and
- One indicator (Graduate earnings) requires the development of new data sources and protocols, in addition to relying on existing data with the development of new protocols

The Framework will allow the Australian Government Department of Education to publish aggregated and disaggregated data. It is proposed that the tables will be made publicly available for researchers and other stakeholders to conduct bespoke analysis. Individual Domain reports should be released annually with a more comprehensive analysis released once every five years.

Figure 1: Equity Performance Framework for Australian Higher Education

TIER 3: OUTCOMES (Post-higher education)		
Domain 7 Graduate outcomes		
7.01 Graduate earnings 7.02 Graduate satisfaction		
TIER 2: PERFORMANCE (Higher education)		
Domain 4 Aspirations for higher education	Domain 5 Access to higher education	Domain 6 Achievement in higher education
4.01 Intentions to undertake higher education studies 4.02 Year 12 applications 4.03 Non Year 12 applications	5.01 Offers made to students 5.02 Acceptances by students 5.03 Commencements (new) 5.04 Enrolments (all students) 5.05 Course transitions	6.01 Student retention 6.02 Student success 6.03 Student completion
TIER 1: CONTEXT (Pre-higher education)		
Domain 1 Early childhood development	Domain 2 Primary education	Domain 3 Secondary education
1.01 Early childhood development (physical, social and learning) 1.02 Participation in pre-school	2.01 Reading performance 2.02 Numeracy performance 2.03 School attendance	3.01 Reading performance 3.02 Numeracy performance 3.03 School attendance 3.04 Year 12 completion 3.05 ATAR 3.06 Achievement in advanced maths and science

KEY

Regular text = Indicator uses existing data and protocols

Red-coloured text = Indicator requires data and protocols to be created

Blue-coloured text = Indicator uses existing data and protocols but data are potentially too weak for the purposes of the Framework

Red text shaded grey = Combination: some requirement for data and protocols to be created but also uses existing data but data protocols do not currently exist

Of the 24 Indicators, the 11 in Domains 1 to 3 of Tier 1 relate to broader measurements of preparedness for higher education, Indicators in Domains 4 to 6 of Tier 2 report on access and performance in higher education, across all levels of study – sub-bachelor, bachelor, postgraduate coursework (postgraduate) and higher degree by research (HDR).

Indicators in Tier 3's Domain 7 will report data on graduate outcomes.

1. Introduction

Equity is a key issue in Australian higher education policy. This is reflected in continued bipartisan support for action to address the under-representation of specific groups. Australian goals mirror those elsewhere and equity is perhaps the most persistent educational policy issue internationally (Martin, 2009). It has been a policy goal for UNESCO since at least the late 1960s (Faure et al., 1972) and the OECD since the 1970s (Kallen & Bengtsson, 1973).

In Australian higher education policy, six groups of under-represented students have been specifically identified, namely:

- Students from a non-English speaking background (NESB);
- Students with disability;
- Women in non-traditional areas of study (WINTA);
- Indigenous students;
- Low socio-economic status (LSES) students; and
- Students from regional and remote areas.

Working definitions for each of these groups are reported in Appendix A of this document.

It is important to state from the outset that membership of one of these groups does not, in and of itself, constitute disadvantage at the individual level. Further, being identified as a member of one of these groups in no way represents an attempt to disempower persons. The authors understand some individuals within one or more of the aforementioned equity groups might not consider themselves disadvantaged and might resent being labelled as such. However, explication of these groups is acknowledgement, by and through public policy, that in many cases, under-representation in higher education among members of the identified equity groups leads to future socio-economic disadvantage, such as:

- higher levels of unemployment (ABS, 2013a);
- lower levels of lifetime earnings (National Centre for Social and Economic Modelling, 2012; Norton, 2012); and
- worse health outcomes (ABS, 2013b)

The six equity groups are derived from the equity performance indicators identified by Lin Martin (1994). Since then, the Federal Government has been regularly reporting on various aspects of the performance of the higher education sector in respect of access, progression and completion of these six equity groups. Recent policy reviews supporting the continued monitoring of equity group achievement in comparison with the general and student populations include the *Review of Higher Education* (the Bradley Review) in 2008 (Bradley et al, 2008) and the *Review of Higher Education Access and Outcomes for Aboriginal and Torres Strait Islander People* in 2012 (Behrendt et al, 2012).

At the same time it is understood that many causes of disadvantage in higher education occur much earlier in life, and that it is also important to measure whether or not the post-graduation, socio-economic benefits of higher education are being equitably realised.

In 2013 the Australian Government Department of Education (“Department of Education”) commenced work on a comprehensive framework for measuring student equity in higher education. As a result, the Department commissioned the National Centre for Student Equity in Higher Education at Curtin University (NCSEHE) to provide further detail on the proposed framework, its structure, overall logic and potential data sources.

A list of higher education providers included in the framework, the list of approved providers under the *Higher Education Support Act*, is provided in Appendix B. This includes all existing Table A, B, C and Other providers in the higher education sector. This list is not static and the Framework discussed here will apply to all new higher education providers.

This document outlines the proposed Framework. Section 2 provides an overview of the Framework, including the various Tiers, Domains and Indicators. Section 3 outlines criteria for selecting Indicators. Section 4 describes key issues surrounding the definition and reporting of equity students. Section 5 outlines options for the collection and reporting of equity input indicators – those measures which define the level of resourcing and activity associated with equity policy in higher education. Section 6 describes the Tier 1 Domains, Indicators in greater detail. Section 7 does the same for Tier 2 and Section 8 for Tier 3. Section 9 provides an overview of standard reports that will be generated from the Framework.

Although this document presents a completed framework, albeit in draft form, stakeholder consultation forms a vital part of the project scope. In accordance with the project timeline, this draft document is being disseminated now as a consultation paper. Specifically, guidance is sought on the following:

- Is the Framework set out logically, with regard to Tiers, Domains and Indicators?
- Will the Framework assist stakeholders in improving equity in higher education? In terms of the data for each Indicator, is there existing data/information that should be incorporated into the Framework?
- Does the Framework adequately address the issue of pathways to higher education?
- How should the Framework deal with input measures into the equity policy process and what types of funding and programs which should be reported in this context?
- Is there data/information that does not currently exist but is critical enough that processes should be put in place to collect and report it as part of the Indicators for the Framework?
- Do the proposed reports provide appropriate information for stakeholders, with regard to scope, detail and timeliness?

This feedback will be addressed by the authors and incorporated into the final framework submitted to the Department of Education.

2. Overview of the Equity Performance Framework for Australian Higher Education

Education is a lifelong learning activity and higher education is just one stage within this continuum (Candy, 2000). Progression throughout formal lifelong learning is a process of recognising, and building upon, prior learning opportunity. Equally, educational disadvantage can be expressed on a similar continuum, existing from the earliest years for many people, through their educational schooling years, including higher education, and beyond. Disadvantage can be exacerbated or ameliorated in the wider community as much as in the higher education sector itself. The proposed Framework recognises that educational disadvantage is ubiquitous.

The three principles underlying the development of the Framework are as follows:

1. The smaller the gap in inequality in pre-tertiary education, the greater the opportunity will be for disadvantaged students to access and achieve in higher education.
2. It is likely that this inequality will never be fully eradicated and so action must be taken by the higher education sector itself to recognise and alleviate this disadvantage throughout the higher education experience.
3. If this is done effectively, the post-graduation socio-economic benefits resulting from higher education achievement will be more fairly realised by all students.

Therefore, equity performance in higher education is *relative*. That is:

- any increase or decrease in the equity 'gap' – i.e. the difference in higher education outcomes for equity students and the overall student population – needs to be measured relative to any increase or decrease in the corresponding equity gap that occurs in the pre-tertiary education years; and
- any apparent improvement in equity performance within the higher education sector itself needs to be assessed in relation to future changes in the post-graduation socio-economic benefits realised by these students..

This is the basis for the three-tiered Framework.

Tier 1: Context (Pre-higher education)

Success in higher education is highly contingent upon prior success in secondary education, which in turn is based upon a child's social, emotional and intellectual development in primary education. Even at this early stage, a high-quality pre-school education provides a better start to a child's formal schooling years and can help alleviate the effects of social disadvantage. Transition into and from the early childhood years is extremely important for the child's future physical, emotional and intellectual development (Sylva, Melhuish, Sammons, Siraj-Blatchford, & Taggart, 2010; Yeboah, 2002).

However in Australia, as in many other countries, there is a gap between the highest and lowest performing students in the pre-tertiary schooling years. In fact, relative to other OECD countries, Australia has a higher-than-average level of inequality in this respect (Jensen, Reichl, & Kemp, 2011). Access to higher education is built upon principles of meritocracy but "taking into account, in making such decisions about the selection of students, educational disadvantages that a particular student has experienced" (Department of the Attorney General, 2003, p. 21). It is therefore necessary to measure the extent of educational disadvantage experienced by students prior to accessing higher education.

At the Tier 1 level, the overall (i.e. academic, social and physical) development of equity students is measured relative to the overall, corresponding student population. Measuring pre-higher education disadvantage in this manner assists the subsequent measurement of performance of the higher education sector in two key ways. First, it helps contextualise the sector's performance. For example, if the educational disadvantage 'gap' experienced by Indigenous students (compared to all students) is narrowing, the subsequent performance of the higher education sector – after an appropriate time period - can be contextualised, allowing judgements as to its relative over or underperformance. Second, areas of focus/activity can be more accurately identified. For example, if the gap in Year 12 performance between LSES and all students remains high, then greater effort may be required to provide alternative pathways to admission to higher education for these students.

Tier 1 has three Domains:

Domain 1 – 'Early childhood development,' comprising two performance Indicators.

Domain 2 – 'Primary education,' comprising three performance Indicators.

Domain 3 – 'Secondary education,' comprising six performance Indicators.

Tier 2: Performance (Higher education)

Tier 2 is where the traditional focus of equity performance measurement has been. As with the current approach, the Framework will continue to measure the relative performance, applications, offers, enrolments, retention and progression of the six equity groups. However the Framework will provide greater detail on the pathways into higher education used by disadvantaged students, as well as their progression and performance throughout their studies. In terms of measuring student performance, there are three key elements of Tier 2 are:

1. Improved measurement and tracking of equity students within and after graduation from the higher education sector.
2. Improved reporting on students belonging to multiple equity groups and levels of study (sub-bachelor; bachelor; postgraduate; and higher degree by research (HDR)).
3. A greater focus on articulation between course levels, for instance, sub-bachelor and undergraduate degree programs.

Tier 2 has three Domains:

Domain 4 – ‘Aspiration,’ comprising three performance Indicators.

Domain 5 – ‘Access,’ comprising five performance Indicators.

Domain 6 – ‘Achievement,’ comprising three performance Indicators.

Tier 3: Outcome (Post-higher education)

Equitable access to higher education is a positive outcome only if it results in relative (i.e. to the wider population) socio-economic opportunities and benefits. There is a wealth of research (see for example Department of Employment Education and Training, 1990; Martin, 1994), that demonstrates under-representation in higher education leads to later socio-economic disadvantage.

For example:

- people with higher education qualifications have lower levels of unemployment on average. In 2013, only 2.9% of people with a bachelor degree were unemployed, compared to 4.4% of those with no or lesser qualifications.¹
- on average, people with higher education qualifications have higher lifetime earnings.²

¹ According to ABS 6227.0 - Education and Work, Australia, May 2013 data (Table 10).

² Estimations as to its magnitude vary. For example, the National Centre for Social and Economic Modelling (2012) calculates the difference in median gross lifetime income between people with a Year 12 qualification and those with a bachelor degree range from \$620,000 for women and \$1.1 million for men. Norton (2012) puts it at \$800,000 for women and \$1.1 million for men.

People who attain higher education qualifications also tend to have better health, as they are less likely than their counterparts to smoke or drink, and are more likely to meet recommended guidelines for exercise.³

At the Tier 3 level, Indicators will be used to primarily measure the economic benefits of higher education for equity students, as well as the socio-economic benefits associated with further study. Tier 3 has one Domain:

Domain 7 – ‘Graduate outcomes’, comprising two performance Indicators.

Comparisons by State and Territory

In Australia, higher education policy is complicated by the blurring of responsibilities between the State/Territory and Federal levels of government. With the exception of the Australian National University, universities are created by and answerable to their relevant State or Territory government. However the Federal Government directs most higher education policy, mostly through using its Constitutional funding powers. With regard to equity policy, there is national consistency, primarily through the fairness provisions contained within the *Higher Education Support Act (2003)*. Furthermore, there are no restrictions placed on Australian students applying to study outside their home State/Territory. For these and other reasons the Framework is mostly focussed on the national picture.

However, there are important reasons why equity performance should also provide appropriate State/Territory comparisons. First, Australian higher education students are relatively immobile. For example, in 2013 more than 85 per cent of higher education applicants applied to institutions in their home state and 93 per cent ultimately accepted a home-state offer of enrolment (Department of Education, 2013). These figures are consistent with previous years. Second, many of the factors affecting disadvantage are geographically contextual including economic conditions and State/Territory contributions to pre-tertiary education. Therefore, particularly at the Tier 1 (i.e. context) level, State and Territory comparisons are important. However, it is not necessary to explicate this distinction at the Indicator level as it is captured through reporting.

Comparisons with the General Population

Similarly, comparisons between equity groups in education and their representation in the general population are useful, particularly in view of present and future policy targets for equity participation. These can be sourced from references cited in Section 3 below (e.g. ABS; Productivity Commission) for broad social indicators for some of the measures, as well as underlying population shares and participation rates for the general population.

³ According to ABS 4102.0 - Australian Social Trends, July 2013 data (“Hitting the books: Characteristics of higher education students”).

Such comparisons will include those between a particular equity group and other equity groups, comparisons with the total student population and 'general student population' where this is defined to include all students with no equity group membership, as well as for identified 'converse' groupings, including:

- Low, Medium and High SES groups
- Indigenous and non-Indigenous groups
- Metro, Regional and Remote groups
- Disability, without disability groups
- NESB and English speaking background groups
- WINTA and Women in non-WINTA area groups,

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3. Criteria for selecting Indicators

In line with one of the recommendations within the *Measurement Framework for Equity (MFE)* proposed by the Australian Institute of Health and Welfare, the Indicators informing the Framework meet the ‘SMART’ criteria first proposed by Doran (1981). That is, they are:

- **Specific** – they all target higher education equity in general, as well as specific, Domains;
- **Measurable** – they identify the source of the data;
- **Assignable** – to the relevant organisation/jurisdiction;
- **Realistic** – in that they rely on existing data sources that are controlled by reputable organisations most likely to be in a position to provide data systematically, and over the long term; and
- **Time-related** – in that the data are regularly reported.

These criteria also address key expectations of the Australian Government Department of Education; namely that the proposed framework:

- is focussed on student equity;
- is policy relevant;
- draws on existing data and statistics;
- recognises that contextual factors are important to policy and performance;
- has technical validity and reliability; and
- is feasible and practical.

Although not explicitly recommended by the Australian Government Department of Education in the scope of this project, development of the Framework also took into account the recommendations of the recent *Review of Reporting Requirements for Universities*, which considered ways to ameliorate the reporting burden placed on universities. A key message from the Review is that both the Department and universities seek ways to enhance and streamline current reporting processes, rather than create new ones (PhilipsKPA, 2012).

The Framework is made up of three Tiers. Each Tier has related Domains and within each Domain are specific Indicators that measure higher education equity performance. Underlying each indicator is an Element which represents the measurement of that indicator.

Within and across the Tiers and Domains, a total of 24 Indicators are used to measure higher education equity performance. Overwhelmingly, Indicators rely on existing data, sourced from key (primarily educational) stakeholders who have in place rigorous and systematic data reporting processes and protocols. More specifically:

- Sixteen Indicators use existing data and data protocols;

- Six Indicators rely on existing data and protocols, however the suitability of the data (for the purposes of the Framework) is not ideal;
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- One indicator (Graduate earnings) requires the development of new data sources and protocols as well as relying on existing data with the development of new protocols.

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4. Defining and reporting 'equity' students

There are important issues which complicate the definition and recording of equity group status.

Definitions of the six key equity groups are provided in Appendix A. They differ in the manner in which they are delineated in higher education. In some instances, equity status is self-reported, such as NESB, Indigenous students, and students with disability. Others, such as LSES and regional and remote students are subject to area measurement, whereby the permanent home address of a student defines their status. Of all equity groups, only 'Women studying in non-traditional areas' is measured with relative precision. In the case of geographically-defined equity (i.e. LSES, regional and remote) it has lesser effect at the early stages of enrolment, but can affect the quality of data as the student progresses through their studies and, potentially, changes residence.

Indigenous students and students with disability are both entirely self-reported and it is generally assumed that both are under-reported (Australian Curriculum Assessment and Reporting Authority, 2009; Australian Institute of Health and Welfare, 2014). This is a particular issue for students with disability, as there is evidence that younger people are less likely to report disability than older people (Australian Bureau of Statistics, 2011). Furthermore the National Disability Coordination Officer Program's own advice in this respect is that:

"The decision to disclose is a difficult one. The choice will be different for everyone because they have different experiences and different needs. Disclosing is a personal decision - you are the only one who can make it. Don't give in to pressure to disclose for the sake of other people, you are the one who will live with the positive and negative outcomes" (National Disability Coordination Officer Program, 2011).

The definition of disability under the *Disability Discrimination Act 1992* (DDA) is broad and covers a wide range of physical, psychiatric and intellectual disabilities. It also includes disabilities that previously existed but no longer exist, or may exist in the future. However the Australian Bureau of Statistics (ABS), through its Survey of Disability, Ageing and Carers (SDAC), defines disability more simply as "any limitation, restriction or impairment which restricts everyday activities and has lasted or is likely to last for at least six months" (ABS, 2009). As the SDAC is the primary and most reliable source of statistical information for disabilities (Qu, Edwards, & Gray, 2012) it is therefore possible that what is being reported does not fully represent the actual or legal definition of disabled. Problems arise when comparing rates of participation in higher education with proportions of the wider Australian community. Recognising the difficulties in both defining the term and collecting statistical information, the Australian Government has moved to adopt a nationally consistent approach. From 2015, all government and non-government schools in Australia will be required to participate annually in the Nationally Consistent Collection of Data on

School Students with Disability. The first data collection took place in selected schools in October 2013 (Thorpe, Shinfield, & Walsh, 2011).

Definitional problems also occur with the LSES category, which attempts to measure socio-economic disadvantage. In Australia, socio-economic status is measured primarily by geographical location but could possibly also be measured by household income or use of welfare services. At the time this report was published, the ABS had just released its own report linking data from the Census of Population and Housing with Tasmanian government school enrolments and NAPLAN data (ABS, 2014). This provides insights into other aspects of the socio-economic contexts of educational disadvantage, including family demographics, parental education and parents' professions. This preliminary study suggests that in many senses SES is a broad rubric that sometimes blurs, rather than provides focus to, our understanding of educational disadvantage.

In addition, accuracy in data collection will never be entirely consistent either within or across jurisdictions. To take just two examples:

1. Higher education students apply, and are enrolled, either through tertiary admission centres (TAC) or directly to/institutions. In the case of a TAC application, offer and acceptance data are recorded. However, when applying directly to an institution, often it is only the enrolment data that are collected. In many cases, particular programs for groups of equity students require direct application, further distorting this aspect of equity statistics.
2. Data collected on students with disability at the early childhood development stage, through the Australian Early Development Census (AEDC) collection, relies on the teacher's own assessment of a student's developmental needs.

As with previous attempts to collect and record higher education equity data, the Framework cannot fully compensate for these issues. However, by focussing on high-quality data sources, jurisdictions and data formats, and by reporting on changes across time or changes to proportional representation, rather than through just the minimal reporting of raw numbers, the effects of these definitional and reporting anomalies can be largely ameliorated.

5. The importance of measuring equity inputs

The proposed Framework is focussed on equity outcomes; that is the relative performance of the disadvantaged student as they progress through compulsory education and higher education, then engages in post-graduation work and further study. At the same time, the provision of equity inputs is critical for improving educational outcomes for these students. Broadly speaking, equity inputs fall into four categories, classified as either *funding* or *programs*:

1. **Equity-specific funding** – for example the proposed Commonwealth Scholarships to provide needs-based scholarships to help meet the costs of education;
2. **Equity-enabling funding** – for example the Higher Education Loan Program (HELP), which is available to all domestic students, but has been shown to directly improve equity outcomes;
3. **Equity-specific programs** – for example an outreach program specifically designed to support the higher education aspirations of Indigenous students at the secondary stage of their education; and
4. **Equity-enabling programs** – for example a Year 12 numeracy development program run for all students in a particular school; or support for Indigenous staff development in higher education.

Examples of all four categories are shown in Figure 2 below.

Measuring the performance of equity inputs is far less straightforward than measuring those of equity outcomes. For example, whilst one can say with a high degree of confidence whether enrolments from regional students are increasing over time, it is much more difficult to ascribe the existence of one or multiple equity inputs with a concomitant change in equity outcomes. Further, making a distinction between specific and non-specific funding and programs can sometimes be difficult.

For example, in Western Australia the State Government recently announced changes to its education funding formula, redirecting approximately \$45 million from secondary to primary schools over a five-year transition period. Reasons for the changes included the need to direct more money to Aboriginal and Torres Strait Islander student support and a greater focus on resourcing the early childhood years of education (Collier, 2014). Both are key platforms for eventual higher education equity, but are not labelled equity funding. The initiative includes an equity-specific component (to Aboriginal and Torres Strait Islander student support) and a non-specific component (early childhood education for all students). Furthermore, as the money for primary education has been redirected from secondary education, it is not clear whether this would – for the purposes of the Framework - be reported as an increase in one and a decrease in the other or not reported at all.

It is easier to measure equity funding as an input (i.e. its provision) than as an outcome (i.e. what it achieves). This is particularly the case when evaluating the effectiveness of outreach programs. For example, parental support, academic rigour, linkages between educational sectors, and access to technology are all known factors that increase success; however they are less often able to be proven (Swail & Perna, 2001). Furthermore, the bespoke nature of many support programs means that it is difficult to validate circumstantial evidence by implementing the same program in multiple settings with different populations (Schultz & Mueller, 2006). Ultimately, the uncertain and long-term nature of many support programs means that deriving specific cause and effect behaviour between an initiative and any future improvements in higher education equity are almost impossible.

Figure 2: Types of equity inputs

Equity-specific funding	Equity-enabling funding	Equity-specific programs	Equity-enabling programs
Higher Education Partnerships Program	Higher Education Loan Program	University outreach programs for prospective equity students	University community outreach programs
Community sourced funding for equity programs and scholarships	New Colombo Plan funding	University support programs for current equity students (e.g. bridging courses)	University support programs for current students (e.g. bridging courses)
University bursaries for equity students to finance ongoing course-related expenditures		Support of student organisation initiatives based around equity status	Specific support programs (e.g. support programs for student IT use)
Equity scholarships		Linkages between university and community groups to support equity students	Unique skill based courses (e.g. short-term communications' skills courses)
(Proposed) Commonwealth Scholarships Scheme		Data generation and analytical work to assess equity initiatives	Assistance programs for graduate work placement
Austudy		Extra curricula programs for equity students (e.g. sporting programs)	International linkage and overseas study programs
Abstudy		Accommodation assistance for equity students	Extra curricula programs for students
		Specific infrastructure initiatives for equity students (e.g. infrastructure for students with disability)	Accommodation assistance
		Student experience surveys	Assistance programs for course-related work placement

However the fact remains that the importance of measuring, reporting and assessing the effectiveness of equity inputs is unquestioned. The issue therefore becomes how the relationship between equity inputs and outcomes is best expressed. Three possible (but not excluding other) options are provided below for discussion in the consultation phase. The Framework will ultimately reflect sector feedback on the validity of these options and also the types of equity inputs that should be reported in this context.

Option 1: Creating a distinct Tier for equity inputs

In defining and measuring equity performance in higher education, the AIHW adopts the approach of measuring and reporting a wide range of equity inputs under the rubric of “education system performance” (AIHW, 2014). These include the four categories of inputs as described above i.e. specific and non-specific funding; and specific and non-specific programs and other actions. If this approach were to be incorporated into the Framework, then the Framework might resemble that detailed in Figure 3 below.

One issue that needs to be addressed is the amount of specificity that should be applied to defining Indicators. Generally, caution is recommended in being too specific about defining specific Indicators, due to the highly-fluid nature of funding and program provision. However they must be specific enough for meaningful assessments to be made regarding particular initiatives. Much of this can be captured in the reporting phase. Thus a generically-defined Indicator would not need to change if/when a particular program or funding activity ceases, only the way in which the data informing it are reported.

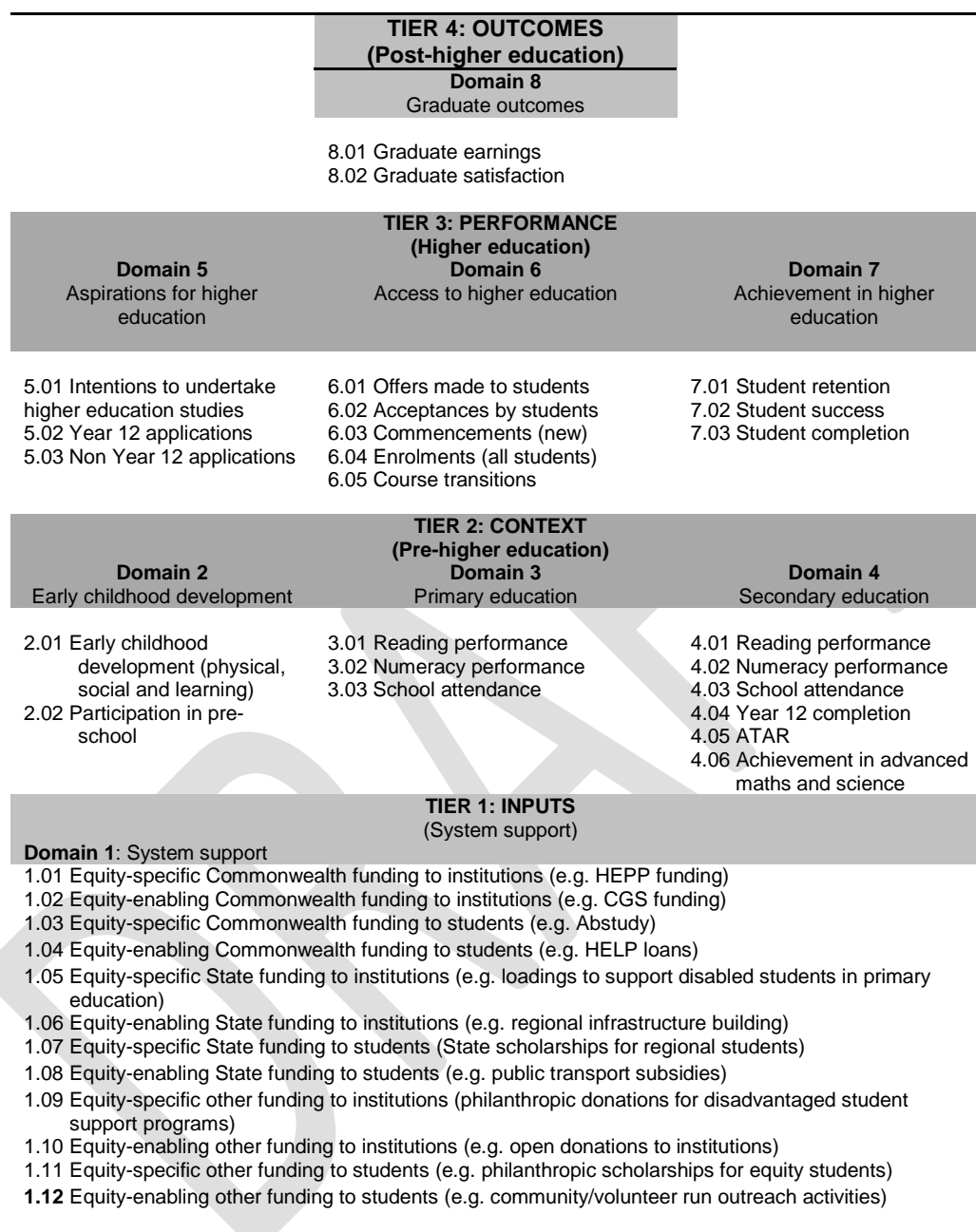
The advantages of this approach include:

- A more holistic representation of the factors that influence equity in higher education, including those occurring before and after the actual higher education ‘experience’;
- A better way of measuring equity inputs that occur across, or affect, more than one Domain. For example, outreach programs operated in partnership with communities often target students across a range of ages/years and/or also target their parents.

The disadvantages of this approach include:

- Complexities in defining equity-enabling funding and activities (for example see WA school-funding case-study described above); and
- Difficulties in capturing data recorded in diverse formats and across multiple stakeholders.

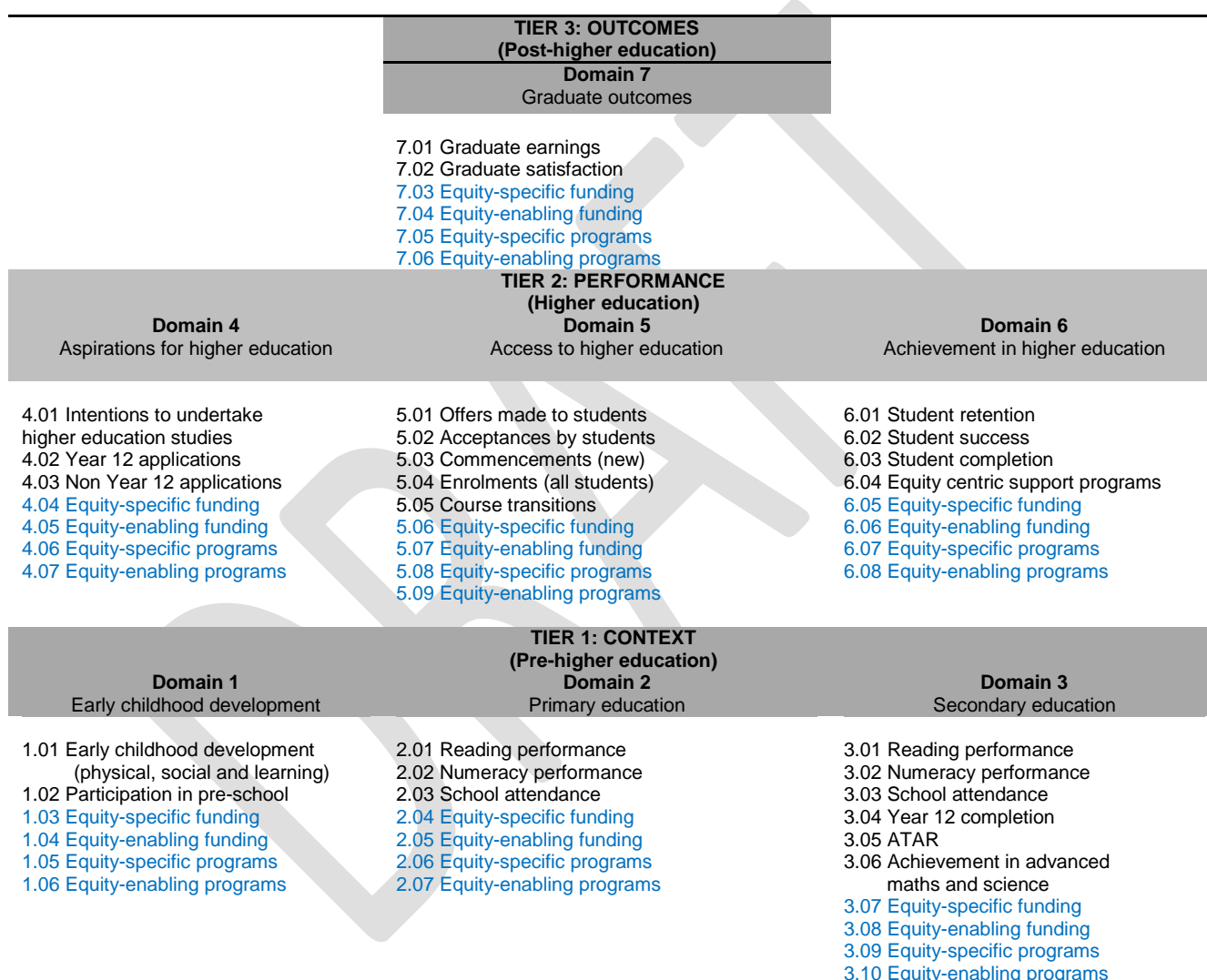
Figure 3: Framework incorporating a holistic approach to reporting equity inputs



Option 2: Integrating equity inputs into the existing Tiers

Another possibility is to more fully integrate the Input Indicators into the existing three-tier approach. If this approach were to be incorporated into the Framework, then the Framework might resemble as detailed in Figure 4 below. As with Option 1, it is recommended that a distinction be made between equity-specific and equity-enabling Indicators.

Figure 4: Framework incorporating an integrated approach to reporting equity inputs



The advantages of this approach include:

- A more accurate representation of the factors that influence equity in higher education, including those occurring before and after the actual higher education ‘experience’;
- A more precise means of identifying key data-holders within specific Domains.

The disadvantages of this approach include:

- Complexities in defining equity-enabling funding and activities;
- Difficulties in capturing data recorded in diverse formats and across multiple stakeholders)
- Difficulties in ascribing certain Indicators to a particular Domain, when the funding/program occurs across more than one Domain.

Option 3: A separate reporting of equity inputs

Here, equity inputs would be measured and reported independently of the Framework. The advantages of this approach include:

- A greater focus on outcomes for disadvantaged students within the Framework itself;
- Encourages stakeholders to avoid drawing simple cause-and-effect relationships between particular equity initiatives and broader equity outcomes;
- Avoids any misapprehension that *all* types of equity inputs (both specific and non-specific) are able to be captured.

The disadvantages of this approach include:

- It potentially marginalises the importance of equity inputs;
- It does not provide a sufficiently-detailed representation of equity performance in higher education; and
- By not considering equity inputs at the same time equity outcomes are assessed, the full range of possibilities for enhancing data collection and management might be overlooked.

6. Tier 1 Domains and Indicators

Introduction

Tier 1 data provide the critical context for qualifying the performance of the higher education sector in respect to equity. It does this by providing ‘snapshots’ of the extent to which the six equity groups experience educational disadvantage at the pre-tertiary years and whether the gap between their outcomes and those of the wider population are narrowing or widening. Assessments are made across three Domains:

1. Early childhood development.
2. Primary education.
3. Secondary education.

Domain 1: Early childhood development

Data source(s): Australian Early Development Census (AEDC); Productivity Commission.

Number of Indicators: 2

Number	Title	What it measures	Why it is important
1.01	Early childhood development	<ul style="list-style-type: none"> • Physical health and wellbeing • Social competence • Emotional maturity • Language and cognitive skills, including literacy and numeracy; and • Communication skills and general knowledge 	All five areas are closely linked to the predictors of good education outcomes.
1.02	Participation in pre-school	<ul style="list-style-type: none"> • Attendance rates in pre-school education 	A high rate of participation in primary education, (including the pre-school year) is critical for higher education success

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Measures of early childhood development have been developed as part of the Australian Early Development Census (AEDC), a census that helps create a snapshot of early childhood development in Australia. Every three years since 2009, the Australian Government has undertaken a census of all children in their first year of full-time schooling, with the next census due in 2015.

Teachers across Australia complete an online checklist based on their knowledge and observations of the children in their class in their first year of full-time school. The checklist contains approximately 100 questions, which measure five important areas of their early childhood development. These five areas⁴ are:

- physical health and wellbeing;
- social competence;
- emotional maturity;
- language and cognitive skills; and
- communication skills and general knowledge.

For each area, children are reported as being 'on track,' 'developmentally at risk,' or 'developmentally vulnerable.' The data are collected within the various State and Territory jurisdictions and overseen and aggregated by the AEDC, working within the Australian Government Department of Education. In the 2012 data collection, information was collected on 289,973 Australian children representing 96.5 per cent of children in their first year of formal full-time schooling (Australian Early Developmental Index, 2013).⁵

AEDC data are collected for individual children and reported at a group level (national, State/Territory or community). Demographic information collected makes the AEDC ideal for inclusion in the Framework, as meaningful comparisons can be made with all higher education equity groups. For example, in the latest collection it was established that:

- females were less likely to be developmentally vulnerable in one or more areas compared with males;
- Indigenous children were more than twice as likely to be developmentally vulnerable than non-Indigenous children;
- children not proficient in English were more likely to be developmentally vulnerable on all the AEDC areas;
- children who reside in very remote parts of Australia are more likely to be developmentally vulnerable; and
- children living in the most socio-economically disadvantaged Australian communities are more likely to be developmentally vulnerable on each of the AEDC areas (Australian Early Developmental Index, 2013).

Discussions with the AEDC have established that standard reports for five⁶ of the six higher education equity groups can be provided for the Framework. To minimise, or possibly avoid altogether, the need to change privacy and/or data reporting requirements, AEDC would

⁴ The AEDC also refers to the areas as 'domains'. However for the purposes of the Framework the term area will be used, so as to avoid confusion with the Framework's own Domains.

⁵ Previously the AEDC was known as the Australian Early Development Index (AEDI) with the name change occurring in 2014. Data collected earlier than this will therefore refer to the AEDI.

⁶ Information on WINTA students cannot be reported.

generate the reports required for the Framework, rather than the Australian Government Department of Education generating the reports itself from the raw data.

Another measure of early childhood development and opportunity is participation in pre-school education.

Presently, data on pre-school education participation is collected by the Productivity Commission as part of its annual publication, Report of Government Services which includes a volume (Volume B) on childcare, education and training (see Productivity Commission 2014), This includes a measure of the number and proportion of population of children aged 4 and 5 years attending a preschool program in the year before full time schooling, with disaggregation across state and broad equity group – LSES, Indigenous, children with special needs.

Domain 2: Primary education

Data source(s): Australian Curriculum, Assessment and Reporting Authority (ACARA)

Number of Indicators: 3

Number	Title	What it measures	Why it is important
2.01	Reading performance (NAPLAN)	Achievement in NAPLAN Reading at Year 3 and Year 5 level	Achievement in literacy and numeracy is critical for higher education success
2.02	Numeracy performance (NAPLAN)	Achievement in NAPLAN Numeracy at Year 3 and Year 5 level	
2.03	School Attendance	Student attendance rates in Year 3 and 5.	School attendance is critical to present and future educational success.

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The Australian Curriculum, Assessment and Reporting Authority (ACARA) is responsible for the Australian Curriculum from Kindergarten to Year 12; being divided into Foundation – Year 10 and then the Senior Secondary Curriculum. The Australian Curriculum sets consistent national standards to improve learning outcomes for all young Australians. It sets out, through content descriptions and achievement standards, what students should be taught and achieve as they progress through school.

It is also responsible for administering the National Assessment Program – Literacy and Numeracy (NAPLAN). The associated reports provide an ideal opportunity for analysis, evaluation and research consistent with the aims of the Framework. ACARA have a defined Research and Data Committee which oversees a well-established data access program. Through ACARA, detailed data regarding the academic performance of all students throughout the primary education years is made regularly available.

The indicators measure two key determinants of academic success:

1. Literacy – focussing on the sub-area of Reading (as opposed to measuring Reading, Persuasive Writing, Spelling, and Grammar and Punctuation). However during the testing phase of the Framework this issue will be discussed more fully with ACARA and, if necessary, the range of the Indicator can be expanded to cover all four sub-areas of literacy.
2. Numeracy.

NAPLAN results are reported using five national achievement scales, as well as reporting students as being below, at or above the national minimum standard relative to the year level. NAPLAN results from one year can be compared with those for previous years, meaning that cross-cohort comparisons are possible. It also allows NAPLAN tests in different years to be reported on the same achievement scale, albeit with some degrees of statistical error.

It has potential to be an effective and valid means of identifying significant differences in achievement across equity groups and the whole population.

To minimise, or possibly avoid altogether, the need to change privacy and/or data reporting requirements, ACARA would generate the reports required for the Framework either through its existing public releases, or if possible, via consultation with the Australian Government Department of Education, rather than the Department generating the reports itself from the raw data. Data confidentiality is likely to prohibit some reporting of disaggregated information about equity group performance in NAPLAN. This also applies to the relevant Domain 3 Indicators.

Aside from academic performance, the other core measure of educational preparedness in primary school is that of attendance. The Productivity Commission (2014) reports data sourced from ACARA on average attendance rates for students in Years 1 to 10 for various schools – government, independent and Catholic (Table 4A130). While more disaggregated data is not available (state and territory or equity group membership), this collection has potential to be expanded.

Domain 3: Secondary education

Data source(s): Australian Curriculum, Assessment and Reporting Authority (ACARA)

Number of Indicators: 6

Number	Title	What it measures	Why it is important
3.01	Reading performance	Achievement in NAPLAN Reading at Year 7 and Year 9 level	Achievement in literacy and numeracy is critical for higher education success
3.02	Numeracy performance	Achievement in NAPLAN Numeracy at Year 7 and Year 9 level	
3.03	School Attendance	Student attendance rates in Year 7 and Year 9.	School attendance is critical to present and future educational success.
3.04	Year 12 completion	Proportion of students completing Year 12 studies	Prior academic success is the main predictor of higher education participation and achievement
3.05	ATAR	Proportion of students achieving high levels of academic success, as measured by Australian Tertiary Admissions Rank (ATAR)	
3.06	Achievement in advanced maths and science	As measured by the proportion of students passing advanced maths and science classes at Year 12 level	

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As with primary education, the rationale for using ACARA and NAPLAN data remains relevant for the secondary education stage, as does the use of Productivity Commission data (sourced from ACARA) on school attendance. The measurement and reporting for the first two Indicators mirrors that of those in Domain 2. The final Indicator measures relative performance in completing secondary studies, particularly at the Year 12 level. This is still the most common pathway into higher education in Australia. For example, in 2014 Year 12 applications represented 55.6 per cent of total applications forwarded through the TACs (Department of Education, 2014). More specifically, Indicators 3.04 – 3.06 measure:

- the rates at which students complete Year 12 studies;
- how many students achieve ATARs sufficient for entry into higher education; and
- pass rates in maths and science subjects (currently pertinent for the WINTA equity group but also will be relevant for alternative equity groups, if changes are made to their classification in the future).

Consideration was also given to reporting Year 10 completion rates. At the time this document was published, it was a requirement in all states and territories that students cannot leave school until they are 17 years old, although from Year 10 this can include options to participate in full-time education, training or employment, or a combination of these activities, until they are 17 years old. Assessing rates of non-full time participation in

education from Year 10 would be only a partial way of measuring future higher education participation. However since Year 12 is the more critical stage for articulation into higher education, Year 12 completion rates are the key area for monitoring relative performance. Put another way, measuring Year 10 and Year 12 completions can be viewed as opposite sides of the coin: the former measures equity students *less* likely to access higher education and the latter measures those students *more* likely. Therefore, in line with the desire to minimise unnecessary reporting, only Year 12 completion is measured for the Framework. The Productivity Commission (2014) reports unpublished data from the Department of Education (in Table 4A.126) on Year 12 completion rates across states and territories. The availability of this data on an ongoing and disaggregated basis will need to be confirmed.

Measurement and reporting of ATAR is located in Domain 3, rather than Domain 4 (Aspirations to higher education) or Domain 5 (Access to higher education). For the purposes of the Framework, the ATAR is viewed as an outcome particular to the secondary education sector. The ATAR is a rank, not a score, in that it shows a student's ranking relative to all students also sitting relevant Year 12 exams that year. For example, an ATAR of 75 means that the student performed as well as or better than 75 per cent of all Year 12 students that year. As entry into most higher education studies is merit-based, the higher a student's ATAR, the more likely it is they will be made an offer to undertake higher education studies.

In many cases, an ATAR is also calculated for many non-Year 12 students, based on a variety of academic undertakings including:

- completion or partial completion of other higher education studies;
- completion of Year 12 in another country; or
- undertaking alternative admission tests, such as the Special Tertiary Admission Test (STAT).

In these cases, a proxy ATAR is assigned to the student, which is meant to represent their position in the cohort had they also undertaken Year 12 studies. However, this is sometimes imperfect science and in reality proxy ATARs are often treated more as a 'score' than an actual ranking. Furthermore, scores are not always made uniformly across or even within States and Territories. Whilst it is true that in some cases the processes for determining proxy ATARs are highly robust, in others this is not the cases. For this reason, only Year 12 ATAR data are used to inform the Framework, meaning it is located within Domain 3.

7. Tier 2 Domains and Indicators

Introduction

Tier 2 provides a picture of the performance of the Australian higher education sector itself, both in the context of equity group performance compared with that of the overall student population, but also in terms of geography (state differences), institutional groupings and level of study (sub-bachelor, bachelor, postgraduate and HDR)

This performance is contextualised against the relative disadvantage already experienced by equity groups of students, as outlined in Section 4. Assessments are made across three Domains:

1. Aspirations for higher education.
2. Access to higher education.
3. Achievement in higher education.

Domain 4: Aspiration towards higher education

Data source(s): *Tertiary Admission Centres (via the Australian Government Department of Education) Longitudinal Survey of Australian Youth (LSAY)*

Number of Indicators: 3

Number	Title	What it measures	Why it is important
4.01	Intentions to undertake higher education studies	Students indicating an interest/desire to undertake higher education studies post-compulsory education	Identifying where/when/why early disengagement with higher education occurs allows for better provision of remedial/support programs
4.02	Year 12 applications	Applications made by Year 12 students to study higher education	Applications are the key source of quantitative data to assess immediate desire to access higher education
4.03	Non-Year 12 (non-school leaver) applications	Applications made by non-Year 12 students to study higher education	

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Aspirations to higher education do not start in the upper secondary years. In one recent Australian study, it was found that students whose parents wanted them to attend university were four times more likely to complete Year 12 and 11 times more likely to plan to attend university compared with those whose parents expected them to choose a non-university pathway. Peers also had a strong influence: students whose friends planned to attend university were nearly four times more likely to plan to attend university themselves

(Gemici, Bednarz, & Karmel, 2014). This accords with other research (see for example Jacobs & Harvey, 2005).

Unfortunately however, reliable data sources are limited. In Australia, one current source for the most reliable source of data tracking higher education aspirations across Domains 2 and 3 is the Longitudinal Survey of Australian Youth (LSAY), which has in the past collected data regarding student expectations and aspirations (e.g. Gemici et al 2014. above).

However LSAY itself recommends not using its data to generate cross-cohort comparisons. The primary advantage of using LSAY surveys to inform intentions to undertake higher education studies is that it uses existing data and protocols. The primary disadvantage of an LSAY-based indicator therefore is that the ways in which the underlying data can inform the Framework are limited and there is uncertainty as to the future operation and frequency of this survey, with the last study cohort commencing in 2009.

Other data sources, such as the ABS's Survey of Education and Work and State-based school leaver surveys provide transitions information but generally for a limited period of time post-school (ABS, 2014a), with other sources such as the Longitudinal Survey of Australian Children (LSAC) also offering potential as indicator sources. The Planning Implementation Phase of this project will explore such possibilities. However, there is potential for these existing sources to include more detailed questions and larger samples to characterise intention to study in a higher education institution.

An alternative is to develop and implement a bespoke aspirational survey that will meet the needs of the Framework. A proposed survey to examine 'widening participation' in Australian schools is an example of such an approach. In general terms this could take the form of a nation-wide survey of students at particular times in their lives: such as Years 5, 7 and 10. The two primary forms the survey might take are:

1. Longitudinal Cohort – i.e. following the same students across various years. This would provide actual, rather than inferred aspirational data; that is an individual's (changing or otherwise) intentions to complete higher education could be tracked over time. The major disadvantage of this approach would be cost: due to attrition significantly large numbers of students would have to be identified at the stage of the first survey, to ensure sufficient numbers of students remained for the final survey.
2. Representational – i.e. selecting different students for each survey. This is a more efficient method of surveying; however actual comparisons over time/surveys are not possible.

The format, timing and organisation responsible for administering the survey would have to be investigated in further detail and the cost balanced against the relative benefit to the Framework. The 4.01 Indicator is, in a sense, an outlier in the Framework as it measures an *intended* outcome, not an actual outcome as do the other Indicators (with the exception of Domain 7). That is, it measures an educational outcome expressed, not yet achieved, by an individual. In some cases this expression is false. For example, recent research suggests that at certain life stages, quantitative aspirational information, such as individuals

responding to questions regarding their future tertiary intentions, may overstate the reality, expressing an aspiration that they think they should desire, rather than something to which they actually aspire (Parker, Stratton, Gale, Rodd, & Sealey, 2013).

Ultimately, the most immediate and reliable source of data information on higher education aspirations that is suitable for the Framework, is the applications data collected by the various tertiary admission centres (TAC), including those institutions who do not use the services of a TAC but who currently submit data to the Australian Government Department of Education as part of this process. Applications occurring outside the TAC system are more problematic as there is no uniform protocol for institutions to collect and report these – typically only offers, acceptances and enrolments are reported. The planning implementation phase of this project can examine remedies for this issue and advice will be sought from stakeholders in regard to it.

The official TAC collections on applications inform the remaining two Indicators for this Domain (4.02 and 4.03), with an ideal extension being the inclusion of data on *all* applications. These measure the actual applications made to access higher education in the year following application. Each year, approximately 70 per cent of applicants accept an offer to enrol in higher education (Department of Education, 2013). The actual proportion is even higher, as this excludes students deferring for twelve months. Unlike Indicator 4.01 therefore, the data informing Indicator 4.02 allows for high levels of accuracy when measuring this aspect of performance. Separation of Year 12 and non-Year 12 applications is important as prior research shows disadvantaged students are disproportionately represented in the non-Year 12 pathway (c.f. Aird, Miller, van Megan, & Buys, 2010; Watson, 2005).

Domain 5: Access to higher education

Domain 5 is one of the current key focuses of higher education equity performance measurement. Under the proposed Framework, existing Indicators will be strengthened, additional enrolment data will be collected and new inputs will be added.

Data source(s): Tertiary admission centres (via the Australian Government Department of Education)
Higher education institutions (via HEIMS)

Number of Indicators: 8

Number	Title	What it measures	Why it is important
5.01	Offers made to students	Undergraduate offers made to students	Offers indicate equity students are gaining access to higher education
5.02	Acceptances by students	Students accepting undergraduate offers	Acceptances indicate students are receiving offers
5.03	Commencements (new students)	New students enrolling in higher education	Enrolments indicate actual access into higher education via various pathways
5.04	Enrolments (all students)	All students (re)enrolling in higher education	
5.05	Course transitions	Students transitioning from one course level to another, for instance, sub-bachelor level to a bachelor level course	Establishes data collection on pathways between post-school education program offerings.

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Strengthening existing Indicators

Currently, the Australian Government Department of Education releases annual reports and data in two key areas:

- 1 Undergraduate Applications Offers and Acceptances Publications – providing summaries and data sheets for applications made through TACs as well as applications made directly to universities, including statistics on:
 - applications;
 - offers;
 - ATAR; and
 - under-represented groups.
- 2 Selected Higher Education Statistics – including information on equity groups, namely:
 - sector-wide enrolments (commencing and all, for both undergraduate and all students); and
 - the same data at the institutional (Table A) level.

These data and statistics will be integrated into the Framework with some enhancements. First, statistics for equity groups are collected as part of the Undergraduate Applications Offers and Acceptances Publications process (Indicators 5.01 and 5.02). Relevant demographic data are currently collected by TACs and the institutions, and are affected by the same limitations as when the data are collected elsewhere.⁷ Thus, no new data need be collected; data only needs to be extrapolated from the current sets. It does not seem feasible to include data on offers at other course levels as these are currently not centrally collected.

Reporting of equity enrolments by Broad Field of Education will be included in the Framework for all equity groups, not just WINTA, because of the relationship between field of study and graduate earnings. In 2012, for example, the median starting salary for a bachelor-degree graduate was \$80,000 for dentistry, \$63,000 for engineering and \$50,000 for social work (Graduate Careers Australia, 2013). Equity in and through higher education relates not only to access in its general sense, but also access to particular courses of study.

Third, to assist with more accurate reporting of equity students in Domains 5 and 6, it is proposed that the Framework take advantage of existing functionality as part of institutional submissions through the Higher Education Information Management System (HEIMS). The primary benefit will be to ameliorate the problems associated with geo-coded equity data. Currently, at each enrolment period a student's address is updated, including the postcode of their residence. This means as studies progress, the 'identity' of many LSES, regional and remote students is lost. However, HEIMS now (as of 2014) records the 'commencing'

⁷ That is, the postcode of the permanent address reported by the applicants is used to derive geo-based equity data; and Indigenous and disability status are self-reported.

address (including postcode) for a student when a new enrolment is created and this is linked to a student's Commonwealth Higher Education Student Support Number (CHESSN). This is a much more accurate indication of the student's equity status, as it does not change throughout their studies. This change will not require institutions to collect any additional data; it represents only a way in which the data are managed and reported through HEIMS. Consequently, more accurate data will underpin Indicators 5.03 and 5.04.

Additional focus on Course transitions

Focus in higher education is currently being placed on course transitions, specifically articulation between course levels. This is especially true to articulation from sub-bachelor programs, although other transitions will gain prominence in different policy contexts. In 2014, the Minister for Education, as part of the 2014-15 Federal Budget submission, advised that both the demand-driven system and HECS-HELP provision would be extended to sub-bachelor places. At the time this document was published, the recommendations were still awaiting Senate consideration. The following assumptions therefore guide the proposed Framework in this respect:

1. The plan to extend the demand-driven system will be expanded to include sub-bachelor places.
2. HECS-HELP will be extended to cover these places for eligible students.
3. The requirement to issue a CHESSN for these new Commonwealth-supported places will apply.
4. These arrangements will extend to cover all higher education (i.e. Table A and non-Table A) providers.

The sub-bachelor provision is particularly important from an equity perspective, given its function as an alternative pathway to undergraduate studies. For this reason particular attention will be paid to sub-bachelor to bachelor articulations within the Framework (Indicator 5.05). Tertiary education equity policies emphasise the importance of educational pathways that facilitate student transfers from institutions in lower-status, vocationally oriented 'second' tiers of tertiary education to institutions in higher status 'first' tiers of higher education, particularly universities. This is because students from disadvantaged backgrounds are more likely to go to the former, whereas more privileged students are more likely to go to the latter (Wheelahan, 2009). Critically, transitions to university for disadvantaged students are more likely to result from completing a higher-level VET qualification, but disadvantaged learners tend to enrol in lower-level qualifications (Griffin, 2014). A primary intention of extending the demand-driven system to the sub-bachelor level is to encourage successful transitions by increasing academic preparation for particular students before they enter a bachelor degree course; and providing a lower risk entry point for LSES students (Kemp & Norton, 2014).

Should the demand-driven system be extended to include sub-bachelor places, then by definition the use of the CHESSN will be similarly extended. This will provide an ideal means of capturing successful transitions from sub-bachelor to bachelor level. Therefore,

whilst Indicator 5.05 is reliant on new data and data protocols, based on current processes it can be reasonably assumed that the quality of both will be high.

Domain 6: Achievement in higher education

Data source(s): Higher education institutions (via HEIMS)

Number of Indicators: 3

Number	Title	What it measures	Why it is important
6.01	Student retention	<ul style="list-style-type: none"> The proportion of students who commenced a bachelor course in year(x) who either complete or return in year(x + 1). Adjusted on a match process using both the Student ID and CHESSN. 	Retention indicates the extent to which students are successfully matched with courses
6.02	Student success	<ul style="list-style-type: none"> The proportion of actual student load (EFTSL) for units of study that are passed divided by all units of study attempted (passed + failed + withdrawn).. 	Success indicates the extent to which students perform in their chosen course.
6.03	Student completion	<ul style="list-style-type: none"> The proportion of specific cohorts of students completing by level of course, broad field of education 	Achievement in higher education is related both to higher education completion and field of study.

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The transition from pre-tertiary to tertiary education is a challenging one for many disadvantaged students. Research into the first year experience in Australian universities indicated students from rural areas and LSES backgrounds believed they were less-prepared in their first year than the overall population (James, Krause, & Jennings, 2010).

Currently the Australian Government Department of Education publishes data for domestic commencing bachelor students by State and Higher Education Institution on:

- attrition rates;
- success rates;
- retention rates; and
- course completions.

These statistics do not currently provide detail on equity groups, although WINTA equity students can be identified from the course completions publication. However, current data collection and reporting processes should be able to accommodate additional reporting of equity students for the Framework. It is recommended that the reporting on retention rates be adopted for Framework purposes, in place of the attrition rate which is its mirror.

At an institutional level, retention and success rates vary considerably across the sector. For instance, in 2012, institutional adjusted success rates ranged from 70.23 to 93.49. For the purposes of the Framework therefore, comparisons will be most meaningful at the institutional level.

In the past, completion data for equity students has been problematic, due in great part to changes to student addresses over the years taken to complete affecting the validity of geo-coded equity data. The inclusion on student records of fields such as ‘commencing postcode field’ could go some of the way to addressing this issue.

DRAFT

8. Tier 3 Domains and Indicators

Introduction

Tier 3 measures whether or not the socio-economic advantages associated with higher education are being realised by equity students in the same way they are for the overall student population. At the Tier 3 level assessments are made across one Domain.

Domain 7: Graduate outcomes

Data source(s): Australian Government Department of Education
 Australian Taxation Office (ATO)
 Graduate Careers Australia (GCA)

Number of Indicators: 2

Number	Title	What it measures	Why it is important
7.01	Graduate earnings	Median salaries of graduates, post-graduation.	Higher-than-average earnings are an expectation of higher education studies
7.02	Graduate satisfaction	Qualitative assessment of graduate satisfaction with their overall course experience	Student satisfaction is an important measurement of the quality of the higher education experience

KEY

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The motivations for engaging in higher education study, and the benefits arising from it, are many and varied. However two of the most universally accepted are:

1. Higher education qualifications result in higher-than-average earnings for the individual.
2. Completion of an undergraduate qualification is the general pre-requisite for undertaking further, postgraduate study, which in turn leads to improved socio-economic outcomes for the individual.

Benefits from higher education arise both for the individual student (in terms of higher lifetime earnings) and for the broader society (in terms of lower unemployment and higher productivity). The rationale for government to invest in higher education is that it contributes to a more productive workforce that is skilled and flexible, leading to higher wages and lower unemployment resulting in higher tax revenues, reduced unemployment expenses and improved international competitiveness (National Commission of Audit, 2014).

Using ATO data to measure and report post-graduation earnings

One possibility for measuring post-graduation earnings is ATO information on income, as required for calculating HECS-HELP repayments. Accessing this data is subject to provisions in underlying higher education and privacy legislation. This challenge notwithstanding, post-graduation, at the one- and three-year point, the Australian Government Department of Education could provide the ATO with de-identified student data files containing the student's CHESN and relevant equity indicators. From this data the ATO will be able to generate reports on average graduate earnings at the State/Territory, institutional and equity group level. The quality of this data will provide a level of detail and specificity regarding the economic benefits of higher education to disadvantaged students previously unavailable.

It is recognised that such a request will require changes to the *Higher Education Support Act (2003)* and/or related privacy legislation, with additional concerns about privacy and the timing of data release also coming into consideration. This will be investigated further, in view of the technical feasibility of the approach.

Using GCA data to measure post-graduation earnings

Currently, data do exist via the Graduate Destinations Survey (GDS) and Beyond Graduation Survey (BGS), administered by Graduate Careers Australia. These surveys provide detail regarding:

- graduate employment outcomes;
- previous employment;
- continuing study;
- work-seeking status;
- work-seeking behaviour;
- past education; and
- key respondent characteristics (e.g. recent qualifications, residency status, etc.).

The GDS is administered approximately four months after graduation and the BGS three years after course completion. There are however two significant impediments to using the GDS and BGS. First, postcode data collected through the survey relate to the graduate's location at the time the survey was undertaken, not during their studies or while growing up. Therefore it is not possible to generate valid data for LSES, regional and remote students. Second, the number of Indigenous respondents and respondents with disabilities is low. Recently announced changes to QILT discussed below, including the creation of a graduate outcomes survey, go some way to ameliorating these issues.

Based on its 2013 survey, Graduate Careers Australia advise the following sample sizes for various equity groups:

Group	Number of survey responses (2013)
General population (Australian domestic bachelor degree (excl. honours) graduates)	39,253
Of these, identifying as Aboriginal or Torres Strait Islander	271
Of these, identifying as having a disability	1,889

The respondent numbers are generally lower still for the BGS. This is because the BGS is a follow-up survey to the GDS; meaning it is sent to significantly fewer graduates.

It may be possible to address the postcode issue by supplying the commencing postcode information to GCA, via the relevant protocols within the Australian Government Department of Education. However the survey response rates for Indigenous students and students with disability may still be too low for the purposes of the Framework.

As part of the 2014–15 Budget, the Australian Government announced the Quality Indicators for Learning and Teaching (QILT), a coherent suite of surveys for higher education that cover the student life cycle from commencement to employment, including:

- the University Experience Survey, measuring satisfaction of current students
- the Graduate Outcomes Survey, examining labour market outcomes of higher education graduates; and
- development of a new Employer Satisfaction Survey to assess the generic skills, technical skills and work readiness of graduates.

All higher education institutions who wish to offer Commonwealth Supported Places will be required to participate in the Quality Indicators for Learning and Teaching. Results from all QILT surveys will be linked to CHESSNs, providing for straightforward identification of all equity groups.

The University Experience Survey, undertaken since 2012, is the only comprehensive survey of current higher education students in Australia. It provides detailed information on the student experience and satisfaction levels of first and later-year students.

From October 2015, the Graduate Outcomes Survey will replace the Australian Graduate Survey in measuring the labour market outcomes of graduates four months after course completion. The survey will collect the same labour market and further study variables as those listed above for the Australian Graduate Survey. A follow up survey will also measure graduate outcomes three to four years after course completion. The Graduate Outcomes Survey will not collect graduate satisfaction data.

A report listing the outcomes from the Employer Satisfaction Survey pilot project has been published (Oliver, Freeman, Young, Yu, & Vemma, 2014). The Employer Survey might be able to provide data for the Framework including the employment characteristics of graduates and the relevance of their qualification to their employment. A total of 2,749

graduate interviews and 539 supervisor interviews were completed from four participating universities. Preliminary findings showed “Graduates were even more reluctant to provide their supervisors’ details than originally anticipated” (Oliver et al., 2014, p. 3) and

“Producing robust results with accurate standard errors for reporting purposes at the level of institution by broad field of education will be difficult, requiring a full census of all graduates. Even with a full census, it may only be possible to achieve a sufficient sample size for larger institutions or by compiling results from smaller institutions over several years” (Oliver et al., 2014, p. 4).

Therefore, inclusion of the Employer Survey into the Framework is at this stage premature, though it should be considered as part of the potential to include QILT data more broadly. In September 2014, the Australian Government Department of Education announced that the Social Research Centre had been selected to administer the QILT from 2014 to 2017.

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9. Standard reports

Introduction

The general principles underlying the analysis and reporting guidance on Tiers, Domains and Indicators are:

1. The Australian Government Department of Education will be responsible for publishing aggregated and disaggregated data for the entire Framework, including brief commentary and analysis of what the data show.
2. Framework reporting of Domains will not be retrospectively published, however indicative retrospective reporting will occur in the formative years, to help guide the development and implementation of the Framework. Should it be determined that the validity of the retrospective data are appropriate for publication, this can be done at the discretion of the Australian Government Department of Education.
3. Reports for individual Domains will be published annually, as soon as all available data has been collected and incorporated into standard Framework reports.
4. Reports including inter-Domain analyses will be provided every three years.
5. Stakeholders will be responsible for 'mixing and matching' the individual Domain reports (published annually) for their own purposes.
6. Wherever possible, aggregated and disaggregated data will be provided in formats that facilitate further stakeholder analysis, such as Portable Document Format (PDF), Excel (XLS) and OpenDocument Spreadsheet (ODS) format.
7. Individual and/or de-identified data, including small (i.e. <5 individuals) data sets will not be published.
8. Specific, tailored requests for data by stakeholders must be made direct to the organisation owning the data, in accordance with the organisation's own data protocols.

Individual Domain reports

Frequency: annually

Format: provided in both overview and analysis (i.e. PDF) and statistical table (i.e. XLS, ODS) format.

TIER 1

Identifier	Title	Domain (Indicators)	Details
R101	Early childhood development for equity groups	1 (1.01, 1.02)	<ul style="list-style-type: none"> Rates and proportional representation of the equity groups in the 5 AEDC areas Includes participation rates in pre-school Includes State/Territory comparisons Includes rates of students developmentally vulnerable in one or more area Includes rates of students developmentally vulnerable in two or more areas Includes information on students experiencing two or more types of disadvantage that result in statistically significantly different rates
R201	Outcomes in primary education	2 (2.01 – 2.03)	<ul style="list-style-type: none"> Comparative performance of equity groups in NAPLAN at Year 3 and Year 5 level in Reading and Numeracy, including rates of students below minimum national standard Comparative cohort gain (Year 3 to Year 5) for equity groups in Reading and Numeracy Includes State/Territory comparisons Includes comparisons between public and private sectors School attendance rates
R301	Outcomes in secondary education	3 (3.01 – 3.06)	<ul style="list-style-type: none"> Comparative performance of equity groups in NAPLAN at Year 7 and 9 level in Reading and Numeracy, including rates of students below minimum national standard Comparative cohort gain (Year 7 to Year 9) in Reading and Numeracy School attendance Year 12 completion rates Comparison of Year 12 completion with the general population Rates of students enrolled in 1 advanced maths + 2 science subjects at Year 12 ATAR rates by vignitile (5% intervals) Includes comparisons between public and private sectors Includes information on students experiencing two or more types of disadvantage that result in statistically significantly different rates

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TIER 2

Identifier	Title	Domain (Indicators)	Details
R401	Intention to access higher education	4 (4.01)	<ul style="list-style-type: none"> Proportional rates of equity students intending to undertake higher education studies in the future Intentions at defined stages in life (e.g. Year 5, Year 7, Year 10) Includes comparisons with the general population Includes information on students experiencing two or more types of disadvantage that result in statistically significantly different rates Includes discipline information (i.e. intending to study what) Includes destination information (i.e. intending to study where)
R402	Applications	4 (4.02, 4.03)	<ul style="list-style-type: none"> Rates and proportional representation of equity groups in TAC/other applications Includes institutional comparisons Includes comparisons with the general population Includes State/Territory comparisons Includes comparisons by Broad Field of Study Includes interstate mobility of equity groups Includes regional-urban mobility of equity groups For Year 12 applicants, Includes comparisons between public and private sectors Includes information on students experiencing two or more types of disadvantage that result in statistically significantly different rates
R501	Offers and Enrolments	5 (5.01-5.04)	<ul style="list-style-type: none"> Rates and proportional representation of equity groups in TAC/other applications, offers and acceptances Comparative performance of equity groups in enrolments in HE providers Includes State/Territory comparisons Includes comparisons with the general student population Includes institutional comparisons Includes basis of admission for all enrolments Includes comparisons by Broad Field of Study Includes age, gender, and mode of study, load (Part/full time); Includes level of study – sub-bachelor, bachelor, postgraduate, HDR. Separates undergraduate enrolments, sub-bachelor enrolments and all enrolments Includes information on students experiencing two or more types of disadvantage that result in statistically significantly different rates
R502	Sub-bachelor transitions for domestic students	5 (5.05)	<ul style="list-style-type: none"> Comparative performance of equity groups in sub-bachelor programs Includes State/Territory comparisons Includes comparisons with the general population Includes institutional comparisons Also successful transition to bachelor programs Includes comparisons by Broad Field of Study Includes age, gender, and mode of study, load (Part/full time); Includes information on students experiencing two or more types of disadvantage that result in statistically significantly different rates
R601	Attrition, success and completion	6 (6.01-6.03)	<ul style="list-style-type: none"> Comparative performance of equity groups in higher education retention, success and completion Uses a cohort approach (i.e. all students enrolling in year x) at x + 4 years and x + 8 years. Separates undergraduate enrolments, and all enrolments Includes institutional comparisons Includes level of study – sub-bachelor, bachelor, postgraduate, HDR. Includes information on students experiencing two or more types of disadvantage that result in statistically significantly different rates

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TIER 3

Identifier	Title	Domain (Indicator)	Details
R701	Graduate earnings	7 (7.01)	<ul style="list-style-type: none"> • Median earnings for equity groups 1 and 3 years post completion (AT0) • Includes institutional comparisons • Includes comparisons with the general population • Includes comparisons between narrow fields of study • Includes information on students experiencing two or more types of disadvantage that result in statistically significantly different rates • Median earnings for equity groups six-months post completion (GDS) • Includes institutional comparisons • Includes comparisons between narrow fields of study • Includes information on students experiencing two or more types of disadvantage that result in statistically significantly different rates
R702	Graduate satisfaction	7 (7.02)	<ul style="list-style-type: none"> • Comparative performance of equity groups in higher education satisfaction • Includes institutional comparisons

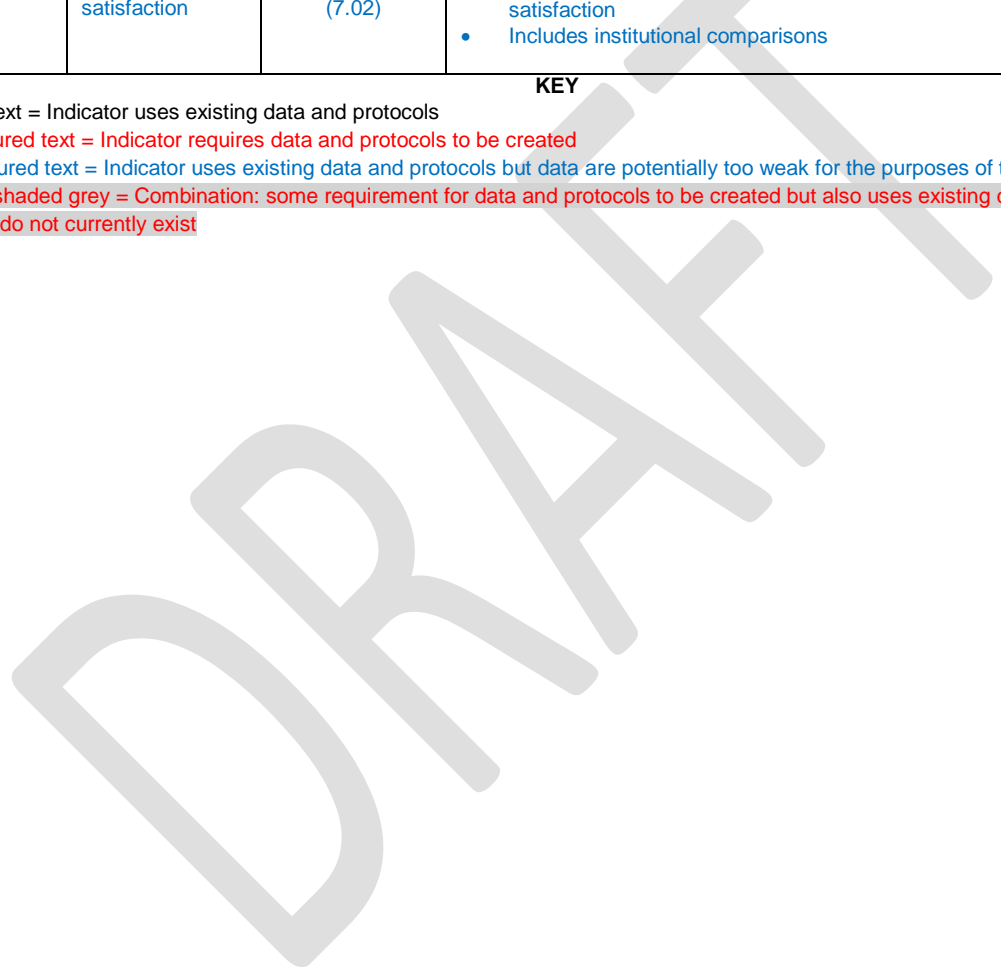
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Inter-Domain reports

Frequency: every five years

Format: provided in both overview and analysis (i.e. PDF) and statistical table (i.e. XLS, ODS) format

As described in Section 2, higher education equity performance is relative. That is:

- Any increase or decrease in the equity ‘gap’ – i.e. the difference in higher education outcomes for equity students and the overall student population – needs to be measured relative to any increase or decrease in the corresponding equity gap that occurs in the pre-tertiary education years.
- Any change in the post-graduation socio-economic benefits realised by equity students, needs to be measured relative to any increase or decrease in the higher education equity gap. Therefore, to contextualise this relative performance, it would be helpful to provide Tier-level reports at regular intervals. Five years is recommended, as it allows sufficient time for cohorts of students to transition between various Domains and Tiers, as well as allow new policy initiatives time to have an impact.

Identifier	Title	Domain (Indicator)	Details
RT101	Early childhood development	1 (1.01, 1.02)	<ul style="list-style-type: none"> • the extent to which the gap between various equity groups is increasing or narrowing at the early developmental level • Includes rates of participation in pre-school • Includes information on students experiencing two or more types of disadvantage that result in statistically significantly different rates • Includes state/territory comparisons
RT102	NAPLAN literacy and numeracy	2-3 (2.01-2.02; 2.03, 3.01-3.02)	<ul style="list-style-type: none"> • the extent to which the gap between various equity groups is increasing or narrowing in NAPLAN reading, numeracy, participation and cohort gain • School attendance • Includes information on students experiencing two or more types of disadvantage that result in statistically significantly different rates • Includes state/territory comparisons • Includes public/private sector comparisons
RT103	Year 12 achievement	3 (3.03-3.06)	<ul style="list-style-type: none"> • the extent to which the gap between various equity groups is increasing or narrowing in Year 12 achievement • School attendance Year 12 completion • Includes ATAR • Achievement gap in advanced maths and science
RT201a	Aspirations	4 (4.01)	<ul style="list-style-type: none"> • the extent to which the gap between various equity groups is increasing or narrowing in intending to undertake higher education studies in the future
RT201b	Aspirations	4 (4.01)	<ul style="list-style-type: none"> • the extent to which the gap between various equity groups is increasing or narrowing in intending to undertake higher education studies in the future • Includes information on students experiencing two or more types of disadvantage that result in statistically significantly different rates • Includes state/territory comparisons • Includes discipline information (i.e. intending to study what) • Includes destination information (i.e. intending to study where)
RT202	Applications	4 (4.02-4.03)	<ul style="list-style-type: none"> • the extent to which the gap between various equity groups is increasing or narrowing in applying to study higher education • Includes information on students experiencing two or more types of disadvantage that result in statistically significantly different rates • Includes state/territory comparisons • Includes discipline information (i.e. intending to study what) • Includes destination information (i.e. intending to study where) • Includes institutional comparisons

RT203	Offers, and enrolments	5 (5.01-5.05)	<ul style="list-style-type: none"> the extent to which the gap between various equity groups is increasing or narrowing in being made offers, accepting and enrolling in higher education Includes information on students experiencing two or more types of disadvantage that result in statistically significantly different rates Includes state/territory comparisons Includes discipline information Includes institutional comparisons Includes course transitions
RT204	Higher education achievement	6 (6.01-6.03)	<ul style="list-style-type: none"> The extent to which the gap between various equity groups is increasing or narrowing in higher education retention, success and completion Separates undergraduate enrolments, and all enrolments Includes institutional comparisons Includes information on students experiencing two or more types of disadvantage that result in statistically significantly different rates
RT301	Graduate earnings	7 (7.01)	<ul style="list-style-type: none"> The extent to which the gap between various equity groups is increasing or narrowing in graduate earnings Includes institutional comparisons Includes discipline comparisons
RT302	Graduate satisfaction		<ul style="list-style-type: none"> The extent to which the gap between various equity groups is increasing or narrowing in satisfaction with course experience Includes institutional comparisons Includes discipline comparisons

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Appendix A: Definition of Australian higher education equity groups

- **Low socio-economic status (LSES) students:** Socio-economic status (SES) is assigned to students on the basis of the socio-economic status of the geographical location in which they reside, as identified by ABS statistical area (SA1) or postcode classification. All SA1 areas are ranked on the basis of ABS estimates of the Socio-Economic Index for Areas (SEIFA) of Education and Occupation calculated using census data. LSES students come from the bottom 25% of Australian SA1s (with a postcode backup) in a national ranking.
- **Students with disability:** Students who self-report a disability to their higher education provider, either at the time of their enrolment or during the course of their studies.
- **Indigenous students:** Students who self-report as Indigenous to their higher education provider, either at the time of their enrolment or during the course of their studies.
- **Students from regional and remote areas:** Regional and Remote students are defined as having a permanent home address in an SA1/postcode area that is classified as regional or remote using historic MCEETYA classifications and the Australian Statistical Geography Standard (ASGS).
- **Women in non-traditional areas of study (WINTA):** Female students who are enrolled in the Natural and Physical Sciences; Information Technology; Engineering and Related Technologies; Architecture and Building; Agriculture, Environmental and Related Studies; Management and Commerce; and the narrow field of Education (Economics and Econometrics).
- **Students from non-English speaking backgrounds (NESB):** Students from a non-English speaking background who have been resident in Australia for less than ten years.

Appendix B: List of Australian Higher Education Providers, 2013

New South Wales

Public Universities (Table A)

Charles Sturt University
Macquarie University
Southern Cross University
The University of Sydney
University of New England
University of New South Wales
University of Newcastle
University of Technology, Sydney
University of Western Sydney
University of Wollongong

Private Universities (Table B)

Not applicable

Private Universities (Table C)

Not applicable

Non-University Higher Education Institutions

Academy of Information Technology Pty Ltd
Alphacrucis College
Australian College of Physical Education (ACPE)
Australian Film, Television and Radio School (AFTRS)
Australian Institute of Music Ltd
Australian International Conservatorium of Music (AICM)
Avondale College of Higher Education
Blue Mountains International Hotel Management School
Campion College Australia
Insearch
International College of Management, Sydney (ICMS)
Jansen Newman Institute Pty Ltd
Kent Institute of Business and Technology
Macleay College
Moore Theological College
Morling College
Murdoch Institute of Technology
Nan Tien Institute
National Arts School
National Institute of Dramatic Art (NIDA)
Navitas Professional Institute Pty Ltd
Raffles College of Design and Commerce
SAE Institute and Qantm College
Study Group Australia Pty Ltd
Sydney College of Divinity
Sydney Institute of Business and Technology (SIBT)
Sydney Institute of Traditional Chinese Medicine
TAFE NSW
TCOL (The College of Law)
TOP Education Group Pty Ltd
Tabor College NSW
The JMC Academy
Think Education Group
UOW College
Universal Business School Sydney

Wesley Institute
Whitehouse Institute

Victoria

Public Universities (Table A)

Deakin University
Federation University Australia
La Trobe University
Monash University
RMIT University
Swinburne University of Technology
The University of Melbourne
Victoria University

Private Universities (Table B)

MCD University of Divinity

Private Universities (Table C)

Not applicable

Non-University Higher Education Institutions

Australian Academy of Design
Australian College of the Arts, Collarts
Box Hill Institute
Carrick Higher Education
Chifley Business School
Chisholm Institute of TAFE
Harvest Bible College
Holmes Institute
Holmesglen Institute of TAFE
John Paul 11 Institute for Marriage and Family, Melbourne
La Trobe Melbourne
Leo Cussen Centre for Law
Marcus Oldham College
Melbourne Institute of Business and Technology
Melbourne Institute of Technology
Monash College
Navitas College of Public Safety
Northern Melbourne Institute of TAFE
Phoenix Institute of Australia Pty Ltd
Photography Studies College (Melbourne)
Stotts Colleges
Tabor College Victoria
The Australian Guild of Music Education
The Cairnmillar Institute School
The Melbourne Institute for Experiential and Creative Arts Therapy (MIECAT)
William Angliss Institute

Queensland

Public Universities (Table A)

Central Queensland University
Griffith University
James Cook University
Queensland University of Technology
The University of Queensland
University of Southern Queensland
University of the Sunshine Coast

Private Universities (Table B)

Bond University

Private Universities (Table C)

Not applicable

Non-University Higher Education Institutions

Australian Institute of Professional Counsellors Pty Ltd
Christian Heritage College
Endeavour College
Gestalt Therapy Brisbane
Jazz Music Institute
Queensland Institute of Business and Technology (QIBT)
Southbank Institute of Technology
TAFE Queensland

Western Australia

Public Universities (Table A)

Curtin University of Technology
Edith Cowan University
Murdoch University
The University of Western Australia

Private Universities (Table B)

The University of Notre Dame Australia

Private Universities (Table C)

Not applicable

Non-University Higher Education Institutions

Australian School of Management
Curtin College
Harvest West Bible College
Perth Bible College
Perth Institute of Business and Technology (PIBT)
Polytechnic West
Tabor College Perth
Vose College of Higher Education

South Australia

Public Universities (Table A)

Flinders University of South Australia
The University of Adelaide
University of South Australia

Private Universities (Table B)

Not applicable

Private Universities (Table C)

Carnegie Mellon University
University College London (UCL)

Non-University Higher Education Institutions

Adelaide Central School of Art
Adelaide College of Divinity
Australian Institute of Business Pty Ltd
Australian Institute of Management SA Division (AIM SA)
Australian Lutheran College
Educational Enterprises Australia (Eynesbury College)
International College of Hotel Management (ICHM)
Kaplan Business School
Le Cordon Bleu Australia
South Australian Institute of Business and Technology (SAIBT)
TAFE SA
Tabor Adelaide

Tasmania

Public Universities (Table A)

University of Tasmania

Private Universities (Table B)

Not applicable

Private Universities (Table C)

Not applicable

Non-University Higher Education Institutions

Tabor College Tasmania

Northern Territory

Public Universities (Table A)

Batchelor Institute of Indigenous Tertiary Education

Charles Darwin University

Private Universities (Table B)

Not applicable

Private Universities (Table C)

Not applicable

Non-University Higher Education Institutions

Not applicable

Australian Capital Territory

Public Universities (Table A)

The Australian National University

University of Canberra

Private Universities (Table B)

Not applicable

Private Universities (Table C)

Not applicable

Non-University Higher Education Institutions

Canberra Institute of Technology

Multi-State

Public Universities (Table A)

Australian Catholic University

Private Universities (Table B)

Not applicable

Private Universities (Table C)

Not applicable

Non-University Higher Education Institutions

Australian College of Theology

For more information on types of institutions please refer to:

http://www.comlaw.gov.au/Details/C2011C00532/Html/Text#_Toc298408521