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Understanding the Completion Patterns of Equity Students in Regional Universities

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Contents

List of Tables

List of Figures

Acronyms

ACER – Australian Council for Educational Research

CHESSN – Commonwealth Higher Education Student Support Number

CQU – Central Queensland University

DET – Department of Education and Training

DVC – Deputy Vice-Chancellor

Fed/FedUni – Federation University Australia

Go8 – Group of Eight

HEI – Higher Education Institutions

HEP – Higher Education Provider

HEPPP – Higher Education Participation and Partnerships Program

HESC – Higher Education Student Collection

HESP – Higher Education Standards Panel

L&T – Learning and Teaching

LSAY – Longitudinal Survey of Australian Youth

MCEETYA – Ministerial Council on Education, Employment, Training and Youth Affairs

NCSEHE – National Centre for Student Equity in Higher Education

PVC – Pro Vice-Chancellor

RUN – Regional University Network

SCU – Southern Cross University

SEIFA – Socioeconomic Indexes for Areas

SES – Socioeconomic Status

SESR-MM – Student Engagement Success and Retention Maturity Model

SExpS – Student Experience Survey

UES – University Experience Survey

UNE – University of New England

USC – University of the Sunshine Coast

USQ – University of Southern Queensland

Executive Summary

Regional universities play an important role in sustaining dynamic regional communities and contributing to regional and national economic prosperity. Regional universities make critical contributions to national imperatives to increase the participation of groups who are underrepresented in higher education and to enable the populations of regional and remote Australia to reach parity in terms of access to and attainment of a higher education qualification. In these ways, regional universities contribute to Australia's knowledge-driven economy by providing regional populations with the opportunity to participate in higher education in order to take on and create the jobs of the future in regional Australia and more widely. It is within this context, that the enhanced persistence and completion of Australian higher education students, particularly regional cohorts, is a goal for both universities and government.

The cohort data analysed specifically for this report shows differences in completion rates between Regional Universities Network (RUN) institutions and metropolitan institutions. The overall differences in national completion rates are echoed within each of the equity groups examined in this report. The completion rates for low SES students, students from regional and remote areas, students with a disability and Indigenous students are lower in RUN universities than in the group of metropolitan universities. With such a finding, it is tempting to resort to reasoning which argues that the different completion rates between regional and metropolitan university cohorts are either a result of student deficits or institutional deficits. Assumptions relating to one or other of these deficit narratives abound. However, the explanation for the differences is much more complex and this study shows that the explanation is more likely to relate to economic influences, situational sociocultural influences, enrolment patterns, and emotional influences than student characteristics or institutional practices. This report describes those influences and their impact and recommends mitigation strategies to enhance the retention of students from equity groups.

Cohort completion rates recently become more visible through development of the Australian Department of Education and Training cohort tracking methodology and the associated series of three 'completions' reports[1]. The two most recent of these reports have provided details of the four, six and nine year completion rates for the cohorts who commenced in Table A institutions from 2005. Completion rates were shown to vary among institutions and also by cohort equity group. To understand why differences exist between RUN and metropolitan universities, we focused on the sociocultural, structural and economic implications of equity group membership and their effects on reported completion rates. We draw on existing evidence to provide a deeper understanding of the issues associated with completions 'league tables'. Our study offers a suite of recommendations, which would mitigate the circumstantial challenges and complex lived realities of RUN cohorts.

Approach

The research conducted for this study had two major components. First, a specific data set was requested from DET to compare the profiles and completion patterns of students attending RUN universities with the profiles and completion patterns of students attending metropolitan universities. The requested data arises from the data set used by DET to undertake its cohort-tracking analysis, which traces the pathways of students through the university system over a nine year period. The tracking analysis uses a unique student identifier that takes into account the movement of students in, out of, and across the university system over a specified period of time. This data set provided the foundation for the later sections of this report. The second component drew on existing evidence and research, which had documented the issues and challenges faced by equity cohorts participating in higher education at RUN universities. In this second study component we sought to establish a rich picture of the sociocultural and economic challenges facing RUN cohorts and RUN equity cohorts in particular. This rich picture provides greater understanding of the complexity of the lived experiences of equity cohorts at RUN universities than can be derived from the quantitative data alone,

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[1] *Completion Rates of Domestic Bachelor Students- A Cohort Analysis, 2005-2012; Completion Rates of Domestic Bachelor Students- A Cohort Analysis, 2005-2013; and Completion Rates of Higher Education Students- Cohort Analysis, 2005-2014* https://www.education.gov.au/completion-rates-cohort-analyses

and importantly it highlights the impact of situational and contextual matters on RUN cohort completion rates.

Findings

Across all equity cohorts, RUN universities have a higher percentage of enrolments of equity group students compared to metropolitan universities. Students from equity groups face a number of structural challenges in accessing, participating and completing higher education, including geographical location, financial constraints, emotional factors and sociocultural incongruity. The impact of belonging to multiple equity groups exacerbates the challenges, which include travel constraints, a lack of access to resources such as high speed internet, affordability of living expenses, the necessity to work whilst studying, challenges to wellbeing including financial stress, isolation from support networks, and challenges to navigating sociocultural incongruities. These structural and compounding factors present a significant challenge to the success and completion of RUN cohorts and in particular, RUN equity group students.

RUN universities have been highly successful in mitigating multiple disadvantage at policy and practice levels. The majority of RUN students successfully graduate from bachelor degrees. Furthermore, RUN universities demonstrate a measure of success in mitigating disadvantage through comparable completion patterns of equity group students and non-equity RUN students, who face some of the same structural challenges. Notably, high levels of student satisfaction with the quality of teaching and learning and student support are achieved by RUN universities.

The proposed continuation of HEPPP in the Government's 2017 Budget is welcomed by RUN universities to help sustain valuable equity initiatives and to develop new initiatives to mitigate disadvantage. However, current policy and initiatives do not completely diminish disadvantage. For example, not all RUN universities receive regional loading funding, which contributes to initiatives targeting equity group students. Thus, achieving institutional or student parity and achieving a fully equitable higher education sector remains a challenge.

Recommendations

Based on the two components of research conducted for this report, we make a series of recommendations for institutions and for the higher education sector. These recommendations will mitigate the multiple sociocultural, financial and structural challenges faced by students at RUN universities, which in turn will alleviate the impact of multiple disadvantage for equity students in regional universities.

Recommendations for Institutions:

- Continue community and family outreach programs to further develop responsive student support networks.
- Offer flexible access to learning resources and diversify curriculum structures, delivery modes and schedules.
- Provide financial subsidies to reduce stress and remove barriers for individual students.
- Create a sense of belonging through partnerships with students.
- Engage families and communities to broaden the understanding and experience of 'going to university'.
- Respond to students' challenges by enabling constructive cycles of learning.
- Offer greater flexibility in learning and assessment design and strategies.

Recommendations for the Sector:

- Increase investment in regional schools and widening participation programs.
- Continue to build partnerships to enhance regional infrastructure and communities.
- Focus on building economic stability in regional communities.

- Promote emotional wellbeing through compensating disadvantage.
- Invest in managing 'critical first encounters'.
- Mitigate inter-generational disadvantage.
- Establish and maintain constructive engagement with regional communities.
- Continue to support relevant research.
- Recognise flexible progression pathways and nested qualifications.

Factors that contribute to completion rates for RUN students are nuanced, complex and multifaceted. The issues facing RUN cohorts and regional universities will not be addressed by adopting narratives that attribute blame to either students or institutions. Rather we must take account of the sociocultural, financial and structural challenges that remain inherent in our system and that impact on completion rates. Our simple comparison between RUN universities and metropolitan universities provided little insight into the lived experiences of higher education for equity group students at RUN universities. However as a whole, this report shines a light on the complex challenges encountered by equity group students and is well placed to facilitate the application of practices that counter disadvantage and thereby promote a fairer and more equitable system of higher education.

1. Introduction

Regional universities perform an important role in creating and contributing to dynamic communities in their regions and to increasing and widening participation in higher education. The successful completion of students who study at regional universities is not only a social justice issue but is critical to building capacity in these communities and contributing to the nation's knowledge-based economy. A strong research base enables a better understanding of the dynamics influencing completion rates of students attending regional universities. This report focuses its analyses on the six members of the Regional Universities Network (RUN) and their students.

Factors influencing regional participation are multi-dimensional and complex, with recent research focusing on the relative effects of membership within equity groups. This study seeks to synthesise knowledge on the characteristics of equity groups and the compounding effects of multiple equity group membership for student cohorts at RUN universities.

Recent higher education policy and funding has encouraged growth in numbers from students from traditionally underrepresented and disadvantaged groups. For example, national initiatives include the introduction of demand-driven student funding; and the Higher Education Participation and Partnership Program, which provides universities with additional funds for low SES students. Regional loading was introduced in 2004 in recognition of both the challenges and advantages of regional higher education delivery (Cardak et al., 2017). The provision of higher education in regional Australia is challenged by population and geography, but ensures the growth of regional communities and a strong national economy (Regional Universities Network, 2013).

DET completion reports have indicated that RUN universities have lower completion rates across all cohorts compared to the completion rates of these cohorts at metropolitan universities. These differences call for a deeper understanding of the factors that impact upon completion rates at RUN universities to shift the focus from the narratives of deficit to one that more appropriately focuses on public policy interventions to mitigate structural and sociocultural disadvantage.

This report, jointly funded by the National Centre for Equity in Higher Education (NCSEHE) and RUN aims to deepen our understanding of the higher education experiences of equity cohorts at RUN universities. It synthesises prior research on the sociocultural and financial context that students at RUN universities encounter to complement a comparative analysis of completion patterns. The first component of research conducted for this report uses data specifically provided for the project by DET and analysed by project team members from ACER. This initial section also uses data available in reports previously produced by DET (Department of Education, 2014; Department of Education and Training, 2015, 2016) to explore the impact of equity group membership on the completion patterns at RUN universities. The second component of the research draws on existing evidence and research, which explores the issues and challenges faced by equity cohorts participating in higher education at RUN universities. This second component establishes a rich picture of the sociocultural and economic challenges facing RUN cohorts and RUN equity cohorts in particular. This rich picture provides greater understanding of the complexity of the lived experiences of equity cohorts at RUN universities than can be derived from the quantitative analyses alone, and importantly, it highlights the impact of situational and contextual circumstances on RUN cohort completion rates.

This report shines light on the complex challenges encountered by equity group students and is well placed to facilitate the application of practices that counter disadvantage and thereby promote a fairer and more equitable system of higher education.

The key questions addressed by this report include:

- Why do completion patterns differ between metropolitan universities and RUN universities?
- How do equity group characteristics impact on student access, participation and completion at RUN universities?
- What can be done to mitigate previous disadvantage to enable equitable completion of RUN university students?

The report is structured as follows. A background section outlines the RUN universities context regarding equity groups in higher education. This is followed by an exploration of completion rates for

equity group students, beginning with national level comparisons and benchmarks for the RUN group. The characteristics of equity cohorts and the underlying implications for participation, engagement and completion of students enrolled at RUN universities will be examined. The report concludes by returning to the research questions listed above and offering recommendations for institutions and the sector.

2. Background and Context

The Regional Universities Network is a network of six universities that have their headquarters in regional Australia and a shared commitment to playing a transformative role in their regions. Established in October 2011 the RUN network includes CQ University, Southern Cross University, Federation University Australia, University of New England, University of Southern Queensland and University of the Sunshine Coast.

The RUN Student Success Innovation Cluster, a collaborative network convened around the RUN DVC/PVC L&T Group and endorsed by the RUN Vice-Chancellors has supported this project as part of a wider approach within RUN to fast track initiatives that lead to increased participation and success of students studying at regional universities. This particular project was led by USC in collaboration with Federation University Australia and the Australian Council for Educational Research, and received funding from the NCSEHE and the RUN. In addition to this project, RUN has supported six key projects, one led by each of the member universities, to work towards achieving this goal.

On average, cohort completion rates at RUN universities are lower than national cohort completion rates (Edwards and McMillan, 2015). In addition, a relatively large proportion of students attending RUN institutions possess one or more of the characteristics derived from the four equity groupings described within this report: low socioeconomic status background, students with disability, regional or remote status and Indigenous students. Data on recent student cohorts show below average completion patterns for students from these cohorts when compared with non-equity, non-Indigenous and metropolitan cohorts. These different completion patterns appear within RUN universities and within metropolitan universities. However, the challenge for RUN appears amplified because the proportion of students attending RUN institutions who are of low SES, from regional or remote backgrounds, who are Indigenous, or who have a disability, is considerably higher than in metropolitan universities.

A wide array of policy and practice initiatives have been developed and implemented based on recent research examining equity group membership and regional university enrolments. This body of recent research will be drawn upon in this report to further explore the implications of equity group membership for students enrolled at RUN universities. It is essential to develop a more nuanced understanding of the relationships that exist between social, cultural, financial and structural issues, demographic and equity characteristics, enrolment patterns, and the completion rates of cohorts at RUN universities to ensure that measures effectively target the lived complexity of diverse student populations.

3. Project Approach

The research underpinning this report was funded by the National Centre for Student Equity in Higher Education under its 2016 Grants Scheme and the Regional University Network. The research had two major components.

The first component draws on data from two sources: cohort tracking data derived from the Higher Education Student Collection; and the 2015 Student Experience Survey. To provide a baseline for the report, a specific data set was requested from DET to compare the profiles and completion patterns of students attending RUN universities with the profiles and completion patterns of students attending metropolitan universities. The requested data arises from the data set used by DET to undertake its cohort-tracking analysis, which traces the pathways of students through the university system over a nine year period. The tracking analysis uses a unique student identifier that takes into account the movement of students in to, out of, and across the university system over a specified period of time. This data set provided the basis for the later sections of this report.

To augment this analysis data, the Student Experience Survey is used to explore the experiences of various groups while at university. A full description on the methods of analysis used for the first component of the research are available from the authors.

The second component drew on contemporary evidence and research about the issues and challenges faced by equity cohorts participating in higher education at regional universities and RUN universities in particular. In this second component we sought to establish a rich picture of the sociocultural and economic challenges facing RUN cohorts and RUN equity cohorts. This rich picture provides greater understanding of the complexity of the lived experiences of equity cohorts at RUN universities than could be derived from the quantitative data alone and importantly it highlights the impact of situational and contextual matters on RUN cohort completion rates.

4. Benchmark Data

Higher education enrolments in Australia have expanded rapidly within the current decade. The growth coincides with changes in national policy relating to funding of students within public universities. This new 'demand-driven system' officially came into place for the start of the 2012 academic year, relaxing previous funding arrangements and ensuring government-subsidised funding for domestic students enrolled in most undergraduate programs in Australian public universities. This policy replaced a previous system whereby enrolment caps were placed on universities and the number of places subsidised by government at each university was limited. This policy change was foreshadowed in 2009 and the announcement was accompanied by some immediate leniency in the prescribed 'caps' – offering universities an opportunity to begin implementing plans for growth. The response of universities to this policy was almost immediate and in many cases substantial.

Many of the national level univariate statistics presented in this report have been previously published in the Commonwealth Department of Education and Training's cohort reports (Department of Education, 2014; Department of Education and Training, 2015, 2016). The results based upon more detailed cross-tabulations, including all results relating to RUN universities, have not been previously published. These results arise from analyses of data provided by the DET in response to a detailed data request from the project team.

The completions data presented in this report largely focuses on the cohorts commencing between 2005 and 2011. However, Table 1 includes descriptive data of cohorts up to 2014. Additional data relating to equity group enrolments across the sector is available through the Commonwealth Department of Education and Training's cohort reports. For this report however, data has only been extracted for commencing cohorts across university groupings.

Commencements in RUN universities rose from 16,355 in 2005 to 25,012 in 2014 (see top half of Table 1). This growth can be divided into three periods. In the four years from 2005 to 2008, the number of students commencing in RUN universities decreased by 3.9 per cent (compared with growth of 2.5 per cent sector-wide). In contrast, the four years from 2008 to 2011 heralded a period of rapid growth in student numbers (18.1 per cent at RUN universities, 18.1 per cent at metropolitan universities and 14.7 per cent at non-RUN regional universities), followed in the next four year period from 2011-2014 by growth of 34.7 per cent for RUN universities, compared to 19.5 per cent at metropolitan universities, 27.5 per cent at non-RUN universities and 22 per cent sector-wide.

The share of each of these university groupings within cohorts did not change substantially throughout the period examined, especially in the period since 2008 (see bottom half of Table 1). In 2014, 10.2 per cent of commencing domestic bachelor students were enrolled in a RUN university, 14.5 per cent were enrolled in a non-RUN regional university, and 75.3 per cent were enrolled in a metropolitan university.

Table 1: Domestic bachelor degree commencements by year commenced study and university grouping (number and percentage change)

Source: DET cohort tracking data, unpublished

| | Years Students Commenced Study | | | | | | | | | | | % Change | |
	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2005-8	2008-11	2011-14
	Number of Commencing Students											% Change	
RUN Universities	16,355	15,413	15,912	15,716	17,120	18,225	18,564	21,980	23,137	25,012	- 3.9	18.1	34.7
Non-RUN Regional Universities	22,611	21,936	23,636	24,131	25,553	28,497	27,671	29,926	32743	35,267	6.7	14.7	27.5
Metro Universities	126,939	129,865	130,937	130,174	140,058	147,750	153,756	169,973	178,364	183,690	2.5	18.1	19.5
National Total	165,905	167,214	170,485	170,021	182,731	194,472	199,991	221,879	234,244	243,969	2.5	17.6	22.0
	Percentage of Commencing Students											Percentage Point Change in Share	
RUN Universities	9.9	9.2	9.3	9.2	9.4	9.4	9.3	9.9	9.9	10.2	-0.7	0.1	0.9
Non-RUN Regional Universities	13.6	13.1	13.9	14.2	14.0	14.7	13.8	13.5	14	14.5	0.6	-0.4	0.7
Metro Universities	76.5	77.7	76.8	76.6	76.6	76.0	76.9	76.6	76.1	75.3	0.1	0.3	-1.6
National Total	100	100	100	100	100	100	100	100	100	100	-	-	-

There are, however, substantial differences between RUN universities and metropolitan universities in the composition of the student body (Table 2). Compared with metropolitan universities, higher proportions of RUN university students are drawn from low SES, regional, remote or Indigenous backgrounds or have a reported disability. Students from two of these groups – low SES and regional backgrounds – comprise a significant proportion of RUN university commencements. In 2011, for example, 31 per cent of domestic bachelor students commencing in RUN universities were classified as low SES and 54.4 per cent of RUN students were from regional areas. The corresponding figures for metropolitan universities were 14.9 per cent and 13.6 per cent, respectively.

Table 2: Domestic bachelor degree commencements by year, university type and selected equity groups (percentage)

Notes: ^ Percentage is based on share among the listed categories for an indicator.

Source: DET cohort tracking data, unpublished

		Percentage of commencers^							Percentage point change in share (2005-2008)	Percentage point change in share (2008-2011)
		2005	2006	2007	2008	2009	2010	2011		
RUN universities										
SES	Low	28.8	29.1	29.5	29.8	30.3	30.9	31.0	1.0	1.2
	Medium	58.9	59.3	60.0	59.3	59.8	59.1	59.6	0.3	0.3
	High	12.3	11.5	10.5	10.9	9.9	10.0	9.4	-1.4	-1.5
Location	Metro	39.7	40.4	40.8	41.8	42.5	43.5	43.7	2.1	1.9
	Regional	58.1	57.5	57.1	56.2	55.4	54.9	54.4	-2.0	-1.7
	Remote	2.2	2.1	2.2	2.1	2.2	1.6	1.8	-0.2	-0.2
Indigenous	Indigenous	1.6	1.5	1.7	2.1	2.5	2.4	2.7	0.4	0.6
	Non-Indigenous	98.4	98.5	98.3	97.9	97.5	97.6	97.3	-0.4	-0.6
Disability	Disability	3.9	3.8	4.1	4.5	4.4	4.8	5.0	0.6	0.5
	No disability	96.1	96.2	95.9	95.5	95.6	95.2	95.0	-0.6	-0.5
Metropolitan universities										
SES	Low	13.7	13.7	13.8	14.0	13.9	14.4	14.9	0.3	0.9
	Medium	44.9	45.3	45.7	46.4	46.2	47.2	47.2	1.4	0.8
	High	41.4	41.0	40.5	39.7	39.8	38.4	37.9	-1.8	-1.8
Location	Metro	86.9	86.8	86.7	86.3	86.4	85.5	85.8	-0.6	-0.5
	Regional	12.4	12.5	12.7	13.1	12.9	13.8	13.6	0.7	0.5
	Remote	0.7	0.7	0.6	0.6	0.7	0.7	0.7	-0.1	0.0
Indigenous	Indigenous	0.9	1.0	1.0	1.1	1.0	1.1	1.1	0.1	0.1
	Non-Indigenous	99.1	99.0	99.0	98.9	99.0	98.9	98.9	-0.1	-0.1
Disability	Disability	3.2	3.3	3.3	3.2	3.6	3.9	4.0	0.0	0.8
	No disability	96.8	96.7	96.7	96.8	96.4	96.1	96.0	0.0	-0.8
National										
SES	Low	16.7	16.7	16.9	17.1	17.1	17.7	18.0	0.4	1.0
	Medium	48.2	48.4	49.0	49.6	49.5	50.1	50.1	1.3	0.5
	High	35.1	34.9	34.1	33.4	33.4	32.2	31.9	-1.7	-1.5
Location	Metro	79.0	79.4	79.3	79.2	79.4	78.6	79.0	0.2	-0.2
	Regional	19.9	19.6	19.7	19.7	19.5	20.4	20.0	-0.1	0.2
	Remote	1.1	1.1	1.0	1.0	1.1	1.0	1.0	-0.1	0.0
Indigenous	Indigenous	1.2	1.2	1.3	1.4	1.4	1.5	1.6	0.2	0.2
	Non-Indigenous	98.8	98.8	98.7	98.6	98.6	98.5	98.4	-0.2	-0.2
Disability	Disability	3.5	3.6	3.6	3.6	3.8	4.2	4.4	0.0	0.8
	No disability	96.5	96.4	96.4	96.4	96.2	95.8	95.6	0.0	-0.8

On average, students commencing in RUN institutions in 2006 experience lower completion rates than cohorts of students commencing in metropolitan universities. For domestic bachelor students commencing in 2006, 55.2 per cent of RUN students completed within nine years of commencement compared with 76.5 per cent of students commencing in metropolitan universities, a gap of 21.2 percentage points. This can be contrasted with lower completion rates among low SES students (53.9 per cent for RUN universities compared to 71.6 per cent at metropolitan universities), remote students (50.6 per cent compared to 69.6 per cent), students with a disability (46.2 per cent compared to 68.4 per cent), and Indigenous students (40.1 per cent compared to 48.6 per cent) (Figures 1 and 2).
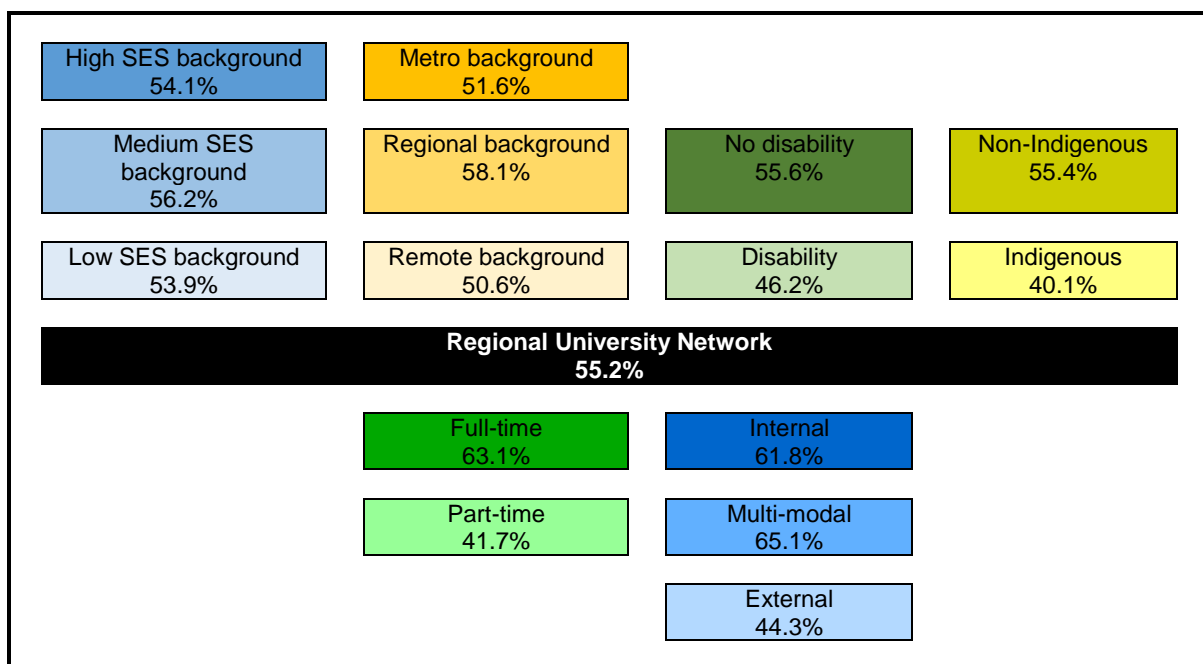
Figure 1: Completion rates, nine years after commencement, for selected characteristics, for domestic bachelor students commencing in 2006 in RUN universities

Source: DET cohort tracking data, unpublished
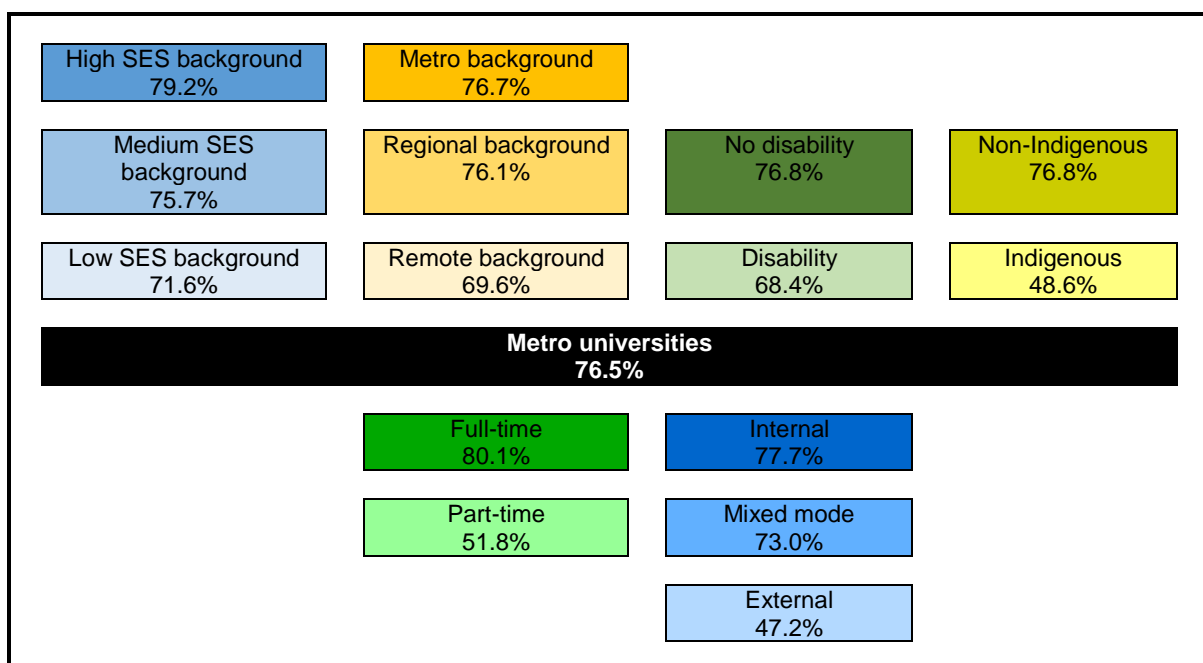
Figure 2: Completion rates, nine years after commencement, for selected characteristics, for domestic bachelor students commencing in 2006 in metropolitan universities

Source: DET cohort tracking data, unpublished

The composition of students enrolled in RUN universities compared to metropolitan universities comprise a greater percentage of students from four the key equity groups examined in this report. For example, RUN university enrolments comprised 9.9 per cent of total commencers but 16.7 per cent of total low SES commencers (based upon the 2005 cohort) (Edwards & McMillan, 2015)

While equity groups tend to experience relatively low completion rates within both metropolitan and RUN universities, there are some notable differences between the two university groupings. The first point of departure relates to socioeconomic status. The socioeconomic gradient in student completions observed both nationally and in metropolitan universities is not as marked among students attending RUN universities. This is illustrated in Figure 3 for the cohort of domestic bachelor students commencing in 2006, tracked over nine years.
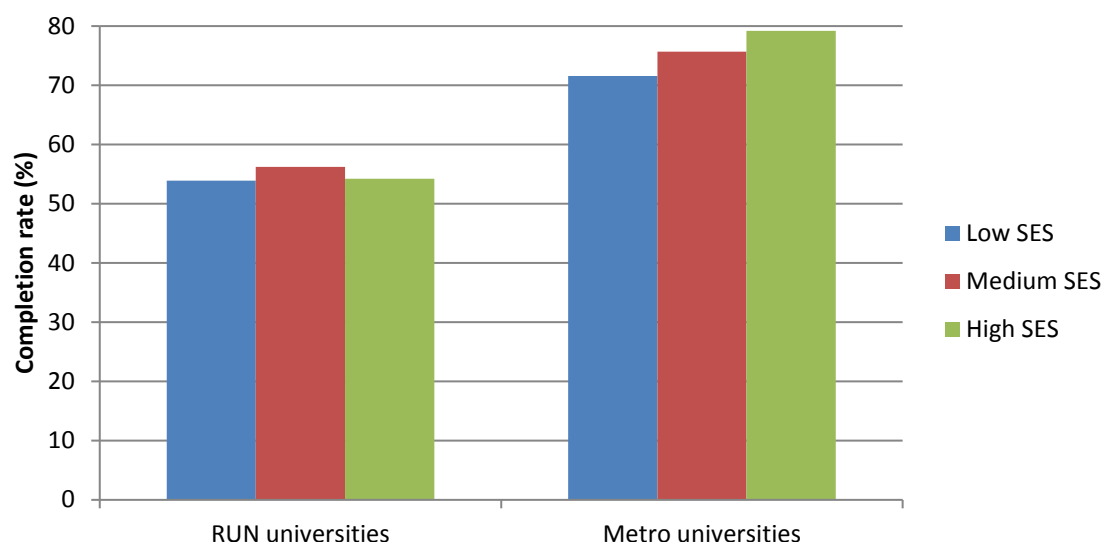
Figure 3: Completion rates, nine years after commencement, for domestic bachelor students commencing in 2006, by socioeconomic and university location
Source: DET cohort tracking data, unpublished

The second difference relates to geographic background. Within RUN universities, students from regional areas have higher completion rates than students from metropolitan areas, who have a similar completion rate to remote students. Whereas within metropolitan universities metropolitan and regional groups have similar completion rates but remote students fare more poorly (Figure 4).
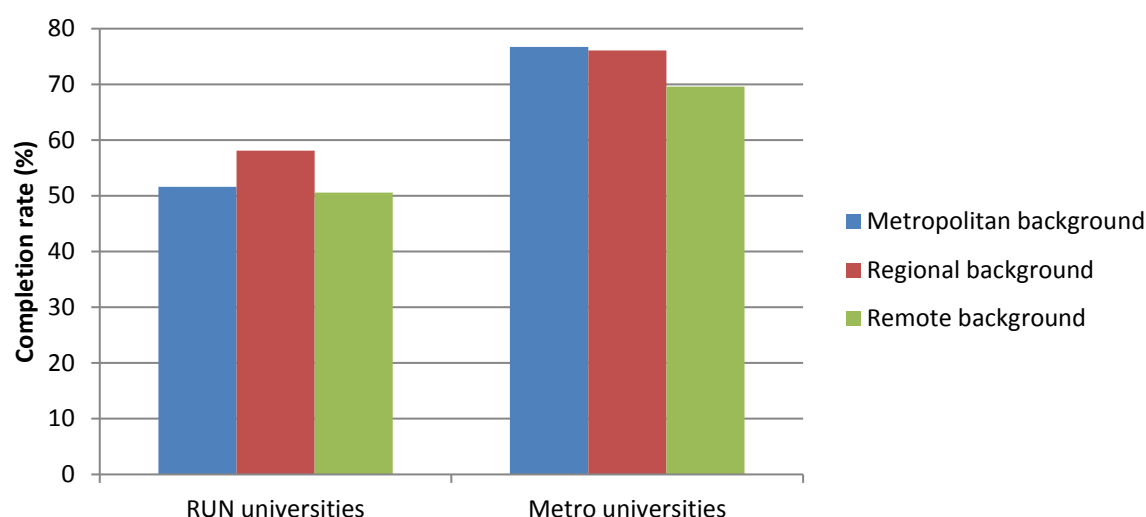
Figure 4: Completion rates, nine years after commencement, for domestic bachelor students commencing in 2006, by geographic background and university location
Source: DET cohort tracking data, unpublished

The overall differences in completion rates between RUN institutions and metropolitan institutions are echoed within each of the equity groups examined in this report, with completion rates for low SES students, students from regional and remote areas, students with a disability and Indigenous students being lower in RUN universities than in metropolitan universities (Figure 5). The differences for the equity cohort completions between RUN and metropolitan are most marked for students with disability and least marked for Indigenous students.
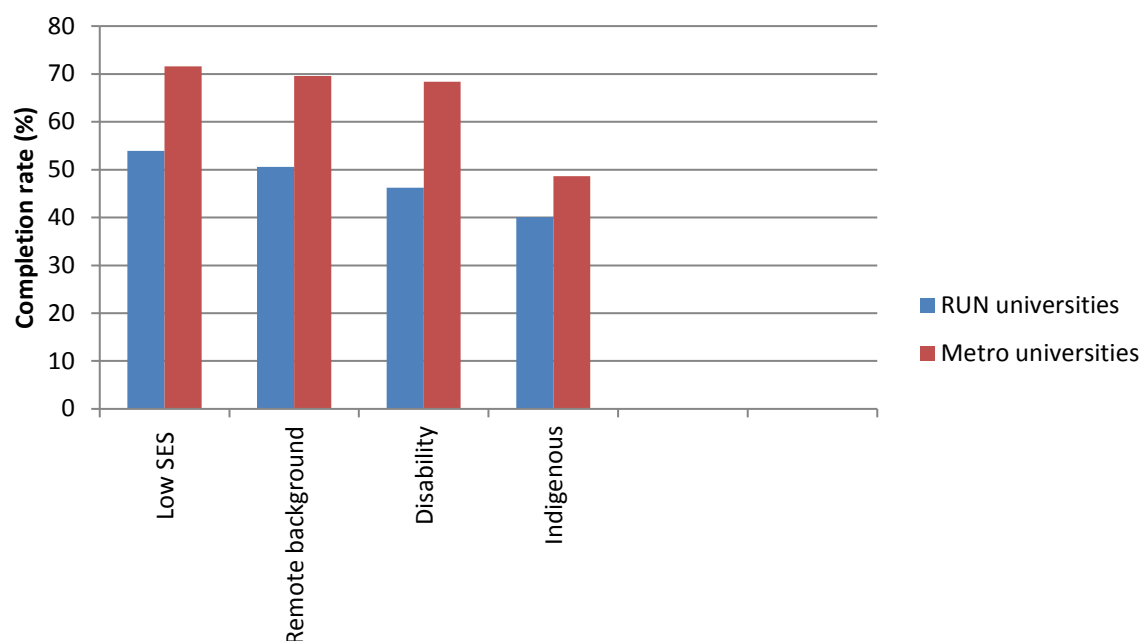
Figure 5: Completion rates, nine years after commencement, for domestic bachelor students commencing in 2006, by equity group and university location
Source: DET cohort tracking data, unpublished

Student characteristics provide predictive factors of the rates of withdrawal before completion, but these factors should not be assigned causal power (Kahu & Nelson, 2017). Being a member of an equity group or an Indigenous person does not cause withdrawal and many students with these characteristics persist to complete their course of study and graduate. Earlier, Devlin (2013) cautioned the rejection of a deficit discourse of students and institutions in investigating and deepening our understanding of the factors that contribute to attrition. In Sections 5 and 6 we draw on the extensive body of contemporary evidence and practice to provide rich understanding about the actual influences on student completion.

5. The Complex Nature of Equity Group Membership

The data presented in Section 4 provided a baseline analysis of the enrolment and completion patterns of cohorts in RUN Universities compared with their non-RUN regional and metropolitan universities. When compared to metropolitan universities the data shows lower completion rates for all cohorts at RUN universities, and lower completion rates for equity groups at metropolitan universities. The data also shows higher enrolments across all equity cohorts at RUN universities. For example, based upon the 2005 commencing cohort, RUN university enrolments comprised 9.9 per cent of total commencers and 16.7 per cent of total low SES commencers (Edwards & McMillan, 2015). Moreover, students at RUN universities are more likely to have a regional or low SES background (54.4 per cent and 31 per cent respectively compared with 13.6 per cent and 14.9 per cent respectively at metropolitan universities), be from an Indigenous background (2.7 per cent compared with 1.1 per cent at metropolitan universities), and are more likely to have a study affecting disability than metropolitan students (five per cent compared with four per cent at metropolitan universities). These patterns require us to develop a richer understanding of the evidence that has investigated the influences on student completion and in particular the evidence that seeks to provide an understanding of the influences on the completions of equity group students.

5.1 Student Characteristics

Lower completion rates for RUN universities cohorts cannot be simply explained by identifying student characteristics as the cause of lower completion rates. A deficit narrative of student attrition conceptualises students themselves as the reason for lower completion rates due to a lack of effort, perseverance or capability (Devlin, 2013). Through this simplistic view of student attrition, students emerge as the architects of their own failure. A second deficit narrative, identifying the quality of learning and teaching at RUN institutions as contributing to lower completion rates is similarly unfounded (see Section 5.2 below). The influences on student access, participation and retention is a substantially more complex issue and this is particularly so in RUN universities.

The most recent DET cohort completions analysis shows that student characteristics explain only a relatively small proportion of the likelihood of completing a degree (Department of Education and Training, 2016, pp. 7-8). The report suggests that,

> … there are likely to be many other factors not captured by the model that might account for completion. For example, student traits such as motivation and resilience, not measured by the model, might be thought to contribute to the likelihood of completing studies (p.8).

This regression analysis examined the variation in completion rates that could be explained by equity group membership and other student characteristics. Of the factors considered, as outlined in Table 3, type of attendance (full-time, part-time) accounted for the highest amount of variation in completion rates (6.31 per cent). Age group, ATAR/basis of admission, mode of attendance (internal, external, multi-modal) and field of education each accounted for 2.08-3.87 per cent of the variance in completions. Less variance was accounted for by socioeconomic status (0.57 per cent), Indigenous status (0.45 per cent), regional classification (metropolitan, regional, remote) (0.36 per cent), gender (0.25 per cent), and language background (0.05 per cent). Together, all these factors only accounted for 12.16 per cent of the variance in the nine year completion rates among domestic bachelor students who commenced in 2005 and 2006. This analysis illustrates that as well as student characteristics that a complex array of other factors is contributing to completion rates, and only some of these are captured in administrative data and national statistics collections.

Table 3: Linear regression analysis (full model and bivariate linear regressions by student characteristics) for nine year completion rates for the 2005 and 2006 cohorts of commencing domestic bachelor students at Table A institutions

Source: Completion Rates of Higher Education Student - cohort analysis, 2005-2014

Student Characteristic	Adjusted R^2 (variation explained), %
Type of attendance (full-time, part-time)	6.31
Age group	3.87
ATAR decile band versus other basis of admission	3.86
Mode of attendance (internal/external/multi-modal)	3.65
Field of education	2.08
Socioeconomic status (SES)[2]	0.57
Indigenous	0.45
Regional classification (metropolitan/regional/remote)[3]	0.36
Gender	0.25
Person from a Non-English speaking background[4]	0.05
Full model including above variables	**12.16**

Completion patterns for equity groups at RUN universities compared to metropolitan universities also discount student characteristics as being significant contributors to lower completions. At metropolitan universities completion rates for low SES and regional background students are close to the metropolitan national average of 73.5 per cent (71.6 per cent and 76.1 per cent respectively) indicating that coming from a non-metropolitan location or being from a low socioeconomic status background seemingly has an insignificant impact upon completion of equity students at metropolitan universities. At RUN universities, low SES students have comparable completion rates to high SES students (53.9 per cent and 54.1 per cent respectively), and students from regional backgrounds have higher completion rates than metropolitan students (58.1 per cent and 51.6 per cent respectively) again indicating that factors other than student equity characteristics contribute to lower completion rates.

Furthermore, student factors associated with attrition do not exist in isolation. Edwards and McMillan (2015) demonstrated that completion rates among equity group students are further diminished when the students also have one or more other 'risk factors' – such as being older, studying part-time or externally, or belonging to more than one equity group – confirming the compounding and complex nature of these influences on completion. Of particular relevance to this research, Edwards and McMillan (2015) also reported that the reasons underpinning current students' intention to withdraw varies by equity group. For example, low SES students reported reasons related to 'getting by' compared with high SES students who reported reasons related to choice and lifestyle for considering leaving. A recent report by the Higher Education Standards Panel recommended that further research is required in order 'to build evidence on what factors lead to high success rates and minimise attrition rates among different types of students' (Higher Education Standards Panel, 2016, p. 14). The findings of this research report provide contributions for consideration by the HESP.

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[2] SES in this report is based on the students' postcode of permanent home residence, with the SES value derived from the 2006 Socioeconomic Indexes for Areas (SEIFA) Education and Occupation Index for postal areas, where postal areas in the bottom 25 per cent of the population aged 15-64 are classified as low SES.

[3] In this report, the student's postcode of permanent home residence is mapped to a regional category using the Ministerial Council on Education, Employment, Training and Youth Affairs (MCEETYA) classification. The MCEETYA codes are derived from the Australian Standard Geographical Classification with some adjustments to cater for the Department's special needs.

[4] For the purpose of this report, a person who has a Non-English speaking background (NESB) is one who meets all these criteria: they are a domestic student; they arrived in Australia less than 10 years prior to the year they commenced their course; and a language other than English is spoken at home.

5.2 Institutional Factors

A second deficit narrative of early departure is that universities are part of the 'problem' of lower completion rates (Devlin, 2013). The Student Experience Survey combines information to create scales that offer broad insight into five aspects of student experience and engagement with their university.[5] Edwards and McMillan (2015) reported that Learner Engagement, Teaching Quality, Learning Resources, Support and Skills Development showed little variation by equity group at the national level in the 2013 survey data. Further analysis of grouped data from the 2015 Student Experience Survey conducted by the project team for this report indicates that across all cohorts and categories, students of RUN and metropolitan universities had similar experiences of university. Key equity groups do not report meaningful differences in engagement experiences indicating that the 'problem' of student completion cannot be explained by reported experience of university students (see Table 4).

Table 4: Student Experience Survey mean scale scores by university type and equity group, 2015
Source: Student Experience Survey, 2015

		Learner Engagement	Teaching quality	Learning Resources	Support	Skills Development
Regional Universities Network						
SES	High	47.9	71.5	71.2	70.9	68.1
	Medium	55.1	71.5	74.8	69.0	70.3
	Low	55.2	70.8	74.3	68.3	70.5
Location	Metro	52.6	71.9	75.1	69.6	70.3
	Non-metro	56.0	70.8	74.1	68.4	70.2
Indigenous status	Non-Indigenous	54.3	71.5	74.7	69.0	70.2
	Indigenous	52.5	70.2	74.4	69.0	71.0
Disability	No disability	54.7	71.3	74.6	68.9	70.4
	Disability	52.4	70.5	73.1	68.7	68.0
RUN total		54.5	71.3	74.5	68.9	70.2
Metro universities						
SES	High	61.3	69.2	72.0	63.6	68.8
	Medium	61.4	69.7	73.8	65.3	70.2
	Low	61.1	69.7	74.0	66.1	71.0
Location	Metro	61.2	69.4	73.0	64.6	69.7
	Non-metro	61.8	70.3	74.0	66.0	70.5
Indigenous status	Non-Indigenous	61.4	69.5	73.1	64.8	69.8
	Indigenous	59.4	70.6	74.3	67.1	71.1
Disability	No disability	61.4	69.6	73.3	64.8	69.9
	Disability	58.9	68.8	71.1	65.8	67.8
Metro universities total		61.3	69.5	73.2	64.8	69.8

These two deficit narratives of students and learning and teaching quality fail to recognise that the socialcultural and financial influences on student access, participation and retention are a much more complex and multifaceted issue. The following section examines the characteristics of each of the four equity groups profiled in this report by synthesising recent research to develop a more nuanced and richer view of the compounding effects of equity group membership.

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[5] The development of these scales is described by Radloff, Coates, James and Krause (2011) .

5.3 Equity Characteristics

In this report, we focus on four equity groups: students from low socioeconomic backgrounds; students from regional backgrounds; Indigenous students; and students with disability. A summary of definitions is provided in Table 5 and details of characteristics and implications of membership follow. The definition and measurement of each of these groups was limited by the details available in the DET provided cohort data set, which in turn was limited by what was collected through administrative student enrolment systems when each student first enrolled.

Table 5: Measurement of equity groups in the cohort data and the Student Experience Survey

Equity Group	Measurement
Low SES	Socioeconomic status is based on the postcode of permanent home residence of the student at the commencement of their studies. The SES value is derived from the Socioeconomic Indexes for Areas Index of Education and Occupation for postal areas. Postal areas in the bottom 25 per cent of the population aged 15-64 are classified as low SES.
Regional and remote	Regional and remote categories are derived from mapping postcode of permanent home residence of the student at the commencement of their studies onto the Ministerial Council on Education, Employment, Training and Youth Affairs geographic classification. In the broad analyses for the report, results are reported separately for regional and for remote students. In the more detailed analyses, these two groups are collapsed into one non-metropolitan group (referred to in the text as "non-metro") so as to avoid issues of confidentiality and small cell sizes that would have prevented reporting within the remote group.
Indigenous	Indigenous includes all students identifying as Aboriginal and /or Torres Strait Islander.
Disability	Disability includes all students who indicated that they had a disability, impairment or long term medical condition which may affect their study.

5.3.1 Regional Students

Regional students continue to be underrepresented in Australian higher education (Baik, Naylor, & Arkoudis, 2015) and therefore a focus on regional student participation and completion is an critical issue, not only for RUN universities and regional communities, but for the nation as a whole. Regional students account for 54.4 per cent of total enrolments at RUN universities. Many regional students have complex demographic, enrolment and participation characteristics that present challenges for their timely completion. To a significant degree, disadvantage is compounded for regional students through membership in multiple equity groups.

The 2014 First Year Experience survey (Baik et al., 2015) was the first study on student experience to be completed after the Bradley review[6], providing insight into the impacts of the demand-driven funding system. It found that regional students have a greater likelihood of being from low SES backgrounds

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[6] The Bradley Review of Australian Higher Education (Bradley, Noonan, Nugent, & Scales, 2008) was the catalyst for the introduction of the demand-driven funding for eligible students with an entitlement to a Commonwealth Supported Place, allowing institutions to enrol as many eligible students as they deemed appropriate. The demand-driven funding system has led to a large increase in enrolments.

(52 per cent compared with 37 per cent metropolitan students) and are more likely to be Indigenous (three per cent compared to one per cent).

The First Year Experience survey (Baik et al., 2015) also found regional students are likely to be more than 25 years of age (18 per cent compared with 12 per cent of metropolitan students), the first in their family to attend university (37 per cent compared to 27 per cent) and enrolled in a part-time capacity (12 per cent compared with seven per cent).

This data is of significance when examining completion rates of students at RUN universities and the implications of multiple equity group membership. On average, RUN universities students have an average nine year completion rate of 55.2 per cent. When combining equity and enrolment characteristics, RUN university students from non-metropolitan backgrounds have a completion rates of 57.8 per cent, reduced to 42.7 per cent when combined with external enrolment and further reduced to 41.2 per cent when combined with part-time status (see Appendix 2). Multiple equity group membership significantly compounds disadvantage and will be discussed in more detail later in this section.

Baik et al (2015) also found regional students are generally more satisfied with teaching quality, engage in orientation activities and select subjects relevant to their interests than their metropolitan peers. However, they were also more likely to report financial stress due to the associated costs of relocation (44 per cent of students from regional backgrounds compared with 24 per cent from metropolitan universities) even where the regional student had relocated to a regional university. Regional students cited emotional health as being the main consideration in early withdrawal (25 per cent compared with 19 per cent metropolitan students) due to being separated from their emotional and financial support networks (Baik et al., 2015). The financial and emotional implications of higher education for regional students are discussed further in Sections 6.2 and 6.3 respectively.

5.3.2 Students from Low SES Backgrounds

Students from low SES backgrounds are the fastest growing equity group for university enrolments in Australia (Baik et al., 2015). In 2011, RUN universities enrolled the highest percentage of student commencers from low SES background, which at 31 per cent is more than twice the percentage of student commencers from low SES backgrounds (14.9 per cent) at metropolitan universities.

The First Year Experience survey (Baik et al., 2015) reported students from low SES backgrounds more likely to be 25+ years (22 per cent compared with seven per cent high SES), have an Indigenous background (2.5 per cent compared with one per cent), have a regional address (35 per cent compared with 19 per cent), be the first in their family to attend university (59 per cent compared with six per cent of high SES students) and have dependants (12 per cent compared seven per cent high SES). Student from low SES backgrounds were also more likely to be studying part-time (10 per cent compared with five per cent) and studying subjects delivered completely online (16 per cent compared to seven per cent of high SES students).

This data is of significance when examining the implications of multiple equity group membership and completion rates of students at RUN universities. As mentioned previously, students at RUN universities have an average completion rate of 55.2 per cent but when combining equity groups, regional students from low SES backgrounds have a completion rate of 53.9 per cent, and enrolling part-time further diminishes completion to 38.9 per cent (see Appendix 3).

Emotional and financial stress were identified as a factor of attrition for low SES students in the First Year Experience Survey (Baik et al., 2015). Financial stress was experienced by 75 per cent of low SES students compared to 60 per cent of high SES students, and were more likely to considering deferral (22 per cent compared with 16 per cent). Based upon data from the SExpS, commonly reported reasons for early departure among low SES groups were health or stress (32 per cent of those with early departure intentions), study/life balance (30 per cent), financial difficulties (29 per cent), and the need to be in paid work. (25 per cent)[7] (Edwards & McMillan, 2015).

Students from low SES backgrounds also reported feeling anxious about results, feeling less academically prepared than their peers and having difficulties in comprehending material. Low SES

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[7] Note that students could indicate more than one reason for intention to depart early.

students reported having reduced opportunities to access support at home and were likely to be the first in the family to attend university (Baik et al., 2015).

Importantly, students from low SES backgrounds experience difficulties adjusting to university academic culture (Baik et al., 2015). A lack of proficiency in and familiarity with dominant cultural codes and institutional practices compounds the challenges of participation and completion for low SES students and can be attributed to inter-generational disadvantages (Devlin, 2013). The sociocultural impacts of university for equity group students are discussed further in Section 6.4.

5.3.3 Indigenous Students

Access, retention and completion rates for Indigenous students are lower than for all other cohorts, despite Indigenous students being highly committed and motivated at university (Baik et al., 2015). Nine years after commencing study, Indigenous students commencing at RUN universities in 2006 had a completion rate of 40.1 per cent, compared with a completion rate of 55.4 among non-Indigenous students enrolled at RUN universities.

The First Year Experience survey (Baik et al., 2015) found Indigenous students are more likely to have membership in multiple equity groups including having a low SES background (63 per cent compared with 40 per cent of non-Indigenous students), being from a regional area (51 per cent compared with 27 per cent) and are more likely to have a study affecting disability (12 per cent compared with six per cent). Indigenous students are also more likely to be the first in their family to attend university (45 per cent compared to 29 per cent). The compounding effect of membership in multiple equity groups for Indigenous students results in a reduction in completion rates. For example, students at RUN universities have an average completion rate of 55.2 per cent. When combining equity groups, RUN university students who have Indigenous backgrounds have a completion rate of 40.1 per cent. Completion rates are reduced further for Indigenous students when combined with part-time enrolment to 29.9 per cent (see Appendix 4).

However, these lower completion rates cannot be explained by lack of satisfaction with institutions. Significantly, Indigenous students reported that university life suited them (72 per cent compared with 58 per cent of non-Indigenous students), that staff were approachable (88 per cent compared with 74 per cent), and that they had a sense of belonging (66 per cent compared with 46 per cent).

However, Indigenous students were more likely to withdraw from subjects in their first year (25 per cent compared with 14 per cent of non-Indigenous students) citing emotional health, fear of failure and financial stress as being the most common reasons to consider withdrawal.

5.3.4 Students with Disability

The First year Experience survey (Baik et al., 2015) reports students with disability are one of the fastest growing equity groups, second only to low SES students. Students with disability are more likely to be older (26 per cent compared with 13 per cent of students without disability), and be enrolled part-time (14 per cent compared with seven per cent). Students with disability who commenced studies at RUN universities in 2006 had the lowest completion rate after nine years (46.2 per cent compared to 68.4 per cent at metropolitan universities).

Students with disability are more likely to report difficulties with motivation, attendance and comprehension of material, as well as feeling overwhelmed with workload. Students with disability are also more likely to experience financial stress and social isolation compared to students without disability (Baik et al., 2015).

5.3.5 The Compounding Effect of Multiple Group Membership

Many students belong to multiple equity groups and have additional demographic and enrolment characteristics that compound to further lower completion rates. A previous analysis of outcomes for RUN equity group students by particular enrolment characteristics showed that the compounding influence of equity group membership and being enrolled externally or part-time has a significant influence on the likelihood of completing university (Edwards & McMillan, 2015).

A large proportion of students attending RUN universities possess multiple equity characteristics. Edwards and McMillan (2015) reported that completion rates among equity group students are further diminished when they also have one or more other 'risk factors' – such as being older, studying part-time or externally, or belonging to more than one equity group – confirming the compounding and complex nature of these influences on completion. For example, students at RUN universities have an average completion rate of 55.2 per cent but when combining equity groups, regional students from low SES backgrounds have a completion rate of 53.9 per cent, and enrolling on a part-time basis further diminishes completion to 38.9 per cent (see Appendix 3). This pattern is replicated across equity groups (shown as an example in Appendices 1-4). The compounding effect of multiple equity group membership presenting further challenges for the participation, engagement and completion for students from equity backgrounds.

The equity characteristics examined in this report provide a deeper and more nuanced understanding of the complex factors that contribute to access, participation and completion at RUN universities. While some of the factors identified here are predictive of student completion patterns, they are not causal (Kahu & Nelson, 2017) and we caution that care is taken to avoid superficial explanations or the attribution of deficits existing in either students or their institutions.

In this section we have been reminded that students at regional universities, particularly students from the overrepresented equity groups experience multiple and complex geographic, financial, social, emotional, and sociocultural influences that compound previous disadvantage and challenge their experience at university and their persistence and completion patterns. These influences and challenges will be discussed in Section 6.

6. Structural and Sociocultural Influences on Completion

As we have mentioned previously in this report, student characteristics, while representing predictive factors and correlations with early withdrawal, should not be attributed to have causal power (Kahu & Nelson, 2017). Earlier Devlin (2013) reminded the sector to reject a deficit discourse of students and institutions and rather to investigate and deepen our understanding of the factors that actually contribute to attrition. We contend that, institutions should recognise the transformative potential of equity groups and shift away from cultural norms in the development of equitable and effective higher education (King, Luzeckyi, McCann, & Graham, 2015).

In this section, the sociocultural and structural challenges faced by equity students will be explored by synthesising recent research and institutional practices designed to militate against existing disadvantage. In each section, recommendations will be made to the sector and institutions about how pre-existing disadvantage can be mitigated for students from equity groups.

Key equity groups cite different reasons for considering early departure from university. In this report, the synthesising of data and recent research provides evidence that students from equity groups face structural challenges relating to their geographical location, financial circumstances, emotional experiences, and sociocultural incongruities in participating and completing university. Some students will be affected by multiple types of disadvantage, compounding the challenges that they will experience in completing university.

Enrolment patterns are associated with increased challenges in reaching completion with the nine year completion rate for students enrolled on a part-time basis being 41.7 per cent, yet equity group students have higher rates of part-time enrolment. For many of these students, committing to full-time study to gain a bachelor degree qualification is not possible due to geographic, financial and other life-load constraints.

Despite the significant challenges created by these disadvantages, the majority of students at RUN universities still complete bachelor degrees (63.1 per cent of full-time enrolments). Even though degree attainment is the goal, students who do not complete a bachelor degree may obtain positive outcomes from their university experience. Recent research by Schnepf (2017) found that enrolment in higher education even without degree completion contributes to better labour market outcomes for individuals. While there are complex factors that challenge university completion, Schnepf urges policy makers to revise the notion that dropping out is purely negative.

The following sections focus on key structural challenges and enrolment patterns that affect participation and completion of equity group students. Each section contains a discussion about mitigating disadvantage and it leads to a set of recommendations related to each challenge.

6.1 Geographical Influences

Regional students face unique challenges in accessing higher education. Of students who commenced in 2005, those residing in regional areas had a nine year completion rate of 69.8 per cent compared with 75 per cent of metropolitan students (Edwards & McMillan, 2015). A defining feature of living in regional Australia is a reduction in access to services and resources when compared to metropolitan areas (Regional Universities Network, 2013). In response to this challenge, regional loading funding was introduced to some universities in 2004 to improve access to higher education in regional Australia. This recognised the national benefits of sustainable higher education to disadvantaged regional communities (Cardak et al., 2017). Not all RUN universities are recipients of the regional loading funding and regional access and participation rates have remained below metropolitan areas, despite this loading.

For the 30 per cent of Australians living in regional communities, regional universities represent the best use of regional resources and significantly contribute to educational and community capacity (Regional Universities Network, 2013). An inquiry into rural and regional student experiences led by Charles Sturt University, cited in Cardak et al, 2017, found that where a regional university has a physical presence in a particular location, there was an increase in educational aspirations and overall participation in higher education in the regional areas surrounding the campus.

Despite recent initiatives, regional students still face geographical challenges that compound previous disadvantage. For example, there are the challenges associated with travel including the time, distance and risk of travelling, the costs of maintaining a vehicle, petrol expenses, registration or difficulty in accessing other forms of public transport that are financially prohibitive (Regional Universities Network, 2013). RUN university students manage their enrolment and participation patterns to alleviate travel related stress and expenses, which results in large proportions of students enrolling part-time and in external mode. So while the completion rates of 41.7 per cent and 44.3 per cent respectively for students with these enrolment patterns is significantly below the RUN average, it is likely that the pressures on students presented by the geographical challenges of regional living lead in the first place, to students needing to have these types of enrolment patterns.

Regional students also face disadvantage through reduced access to resources. Particularly critical is reliable, high-speed internet access. Census data from the Australian Bureau of Statistics (Australian Bureau of Statistics, 2014-2015) indicates only 79 per cent of people living in remote areas have internet access, compared to 88 per cent of people living in metropolitan areas. Yet, as more students take up flexible, online learning to cope with life-load challenges and undertaking study, reliable high-speed internet access becomes an essential part of their learning experience and the absence of reliable access further compounds regional disadvantage.

Further compounding disadvantage for regional students is the greater likelihood of multiple equity group membership. Regional students are more likely to also be from low SES backgrounds (52 per cent compared with 37 per cent metropolitan students), and 37 per cent of regional students are the first in their family to attend university, compared to 27 per cent of metropolitan students (Baik et al., 2015).

Regional students who are the first in the family to attend university are likely to choose universities that are local to their region and resonate with their worldview. However, some regional students still need to relocate in order to attend higher education. The financial implication of relocating to attend university including the financial expense of relocation, and the cost of living away from home (King et al., 2015) results in financial and emotional challenges. Financial stress was reported by 44 per cent of regional students who had relocated to study, due to the cost of relocation (Baik et al., 2015).

Regional students cited emotional health as being the main consideration in early withdrawal (25 per cent compared with 19 per cent metropolitan students) due to being separated from their emotional and financial support networks (Baik et al., 2015). The financial and emotional implications of higher education for regional students are discussed later in this section.

6.1.1 Mitigating Geographical Influences

Geographical challenges influence access, participation and completion for students at RUN universities. While the majority of RUN students do complete bachelor degrees, both institutional and sector-wide initiatives are needed to ameliorate the experience of higher education for all regional students.

One such initiative, and a critical investment in regional community development, is widening participation programs. The implementation of widening participation programs in regional communities demystifies higher education, thus reducing sociocultural incongruity and promoting alternate and relevant pathways for regional youth (Wood et al., 2017). Through widening participation initiatives, institutions are able to engage families and communities as part of emotional support networks and diminish sociocultural incongruity. Recognising that support networks are essential to student success is a critical consideration for RUN universities. Offering opportunities to students and their families for early positive emotional experiences, such as family-friendly orientation activities, on-campus activities, information sessions and network events helps to build family partnerships that support retention. For example, the University of Newcastle has established the Family Action Centre focusing on research, teaching and practice. The centre caters for the health, wellbeing, social and educational pathways of families and their communities. It also delivers family support services, parenting programs, health evaluation initiatives, and several outreach programs for enabling purposes (Wood et al., 2017).

Access and participation opportunities are also improved for students from equity groups through the development of partnerships with primary and secondary schools, VET providers, other universities, State and Territory Governments, community groups, and other stakeholders (Wood et al., 2017). Partnerships with schools contribute to increased school completions, greater aspiration for university level qualifications and better university preparedness for students from equity backgrounds (Devlin &

McKay, 2017). For example, USC builds partnerships with schools to deliver programs targeting aspiration building, myth busting, academic preparation and marketing activities for primary students (Wood et al., 2017).

Access to resources, especially high speed internet is a challenge that could be somewhat alleviated through the development of sustainable partnerships with established regional structures, for example, accessing high speed internet through local libraries. Diversifying how and when students access resources, and offering flexible study times and locations can significantly enhance the convenience of higher education, thus reducing stress and financial costs. Federation University funds the BA@Community program, offering first year Bachelor of Arts courses in school-based locations. Through this flexible delivery, higher education becomes more accessible to students who may not be able to travel to or access university in person or remotely (Wood et al., 2017). For this type of community partnership to be sustainable, funding cycles need to be lengthened to maintain continuity of the partnerships.

Across the sector, institutional partnerships are also important. Ensuring research findings are disseminated across the sector builds regional institutional partnerships, secures sustainable development of regional higher education through responding appropriately to the structural challenges of regional students.

6.1.2 Recommendations

The following recommendations are made to promote access, support networks and partnerships:

Recommendations for Institutions:

- **Continue community and family outreach to further develop responsive student support networks.**
  Support family-friendly orientation activities, on-campus activities, information sessions and network events.
- **Offer flexible access to learning resources and diversify curriculum structures, delivery modes and schedules.**
  Support flexible options of information sources, study times and locations, and diversify how programs are delivered and completed through regional partnerships. Consider the scheduling and structure of offerings to accommodate time and resource poor cohorts.

Recommendations for the Sector:

- **Increase investment in regional schools and widening participation programs.**
  Support the role of schools and their communities in preparing students for higher education.
- **Continue to build partnerships to enhance regional infrastructure and communities.**
  Support community structures and relationships that facilitate student access, and participation in higher education and promote successful outcomes at successive milestones leading towards degree attainment.

6.2 Financial Influences

The cost of higher education, including fees and living expenses associated with living away from home are significant barriers to participation and completion of regional students (Cardak et al., 2017). Regional students who are from low SES backgrounds are twice as likely to perceive the cost of university fees as prohibitive (James, Baldwin, & McInnes, 1999).

The Regional Student Participation and Migration Report (Cardak et al., 2017) found regional students were more likely than metropolitan students to relocate in order to attend university (57 per cent and 27 per cent respectively). For students who relocate to attend university, the associated living costs can double the cost of a higher education degree (Godden, 2007). Financial expenses for regional students who relocate either to metropolitan universities, or to regional universities compound circumstances of disadvantage. In addition to relocation expenses, regional students also face expenses of travel, text books, printing assignments, childcare, and potential loss of income while on placement (King et al., 2015). All these factors are compounded by isolation from financial and emotional support networks. The cost of travelling home to visit family and access support is an additional financial burden and

source of stress (Coffman, 2011; King et al., 2015). These circumstances are compounded for RUN students where 62.8 per cent of 2011 commencers were more than 20 years of age with 41 per cent of these being more than 25 years of age. The average national completion rates for commencing cohorts over 25 years of age is 58.3 per cent compared with 80.2 per cent for the commencing cohorts aged 19 and under (2005 & 2006 cohort).

Students seeking to mitigate financial stress whatever the source, will find it necessary to participate in paid employment. However, the additional responsibility of work commitments creates stresses that compound the challenges of higher education for equity group students. The First Year Experience survey (Baik et al., 2015) found that 58 per cent of students who work report stress. While stress caused by employment did not impact student overall satisfaction at university (possibly attributed to accommodations made by universities to accommodate working students), SExpS data still reports 29 per cent of students consider withdrawing from university due to financial difficulties (Edwards & McMillan, 2015). For RUN universities, financial stress and its implications for completion rates is an important area of concern given the overrepresented population of students with equity group membership and compounding challenges.

6.2.1 Mitigating Financial Influences

A compounding characteristic of equity group membership is financial hardship. The challenge of financial hardship causes stress, affects student wellbeing and contributes to increased attrition. Thus, financial stability can mitigate some of the challenges experienced by students from equity groups.

Ensuring disadvantaged students have equitable support and resources commensurate to the level of support and resources experienced by non-disadvantaged cohorts may mitigate some pre-existing financial and emotional challenges. One example of financial support applies to workplace learning, used as a mechanism of student engagement (McEwen & Trede, 2014). For students with equity characteristics, an unpaid work place learning placement would likely require a time commitment that would prohibit paid employment for the duration, increasing financial stress. Students from equity groups have multiple demands on their time and financial circumstances, therefore equitable measures must counter this disadvantage. All RUN universities offer scholarships and bursaries to support equity group students. La Trobe University offers a bursary to students from low socioeconomic backgrounds to specifically mitigate financial stress during workplace placement (Wood et al., 2017).

The continuation of funding such as the Higher Education Participation and Partnerships Program can direct additional funds to redress disadvantage for equity group students. Through the allocation of funding to initiatives such as the provision of scholarships, student loans, hire services, subsidised parking fees, relocation and housing assistance and services that assist students to access government payments and subsidies can engender financial stability and significantly contribute to student success. All RUN universities partners offer student equity scholarships. In addition, the regionally located James Cook University, recognises these challenges and specifically allocates a bursary to subsidise the cost of travel (Wood et al., 2017).

6.2.2 Recommendations

The following recommendations are made to promote financial stability for students from equity backgrounds:

Recommendations for Institutions:

- **Provide financial subsidies to reduce stress and remove barriers for individual students.**
  Mitigate financial hardship through the provision of financial support, including scholarships, student loans, hire services, subsidised parking fees and travel costs, relocation and housing assistance, and services that assist students to access government payments and subsidies.

Recommendations for the Sector:

- **Focus on building economic stability in regional communities.**
  Recognise economic stability is critical to student finances and their participation and completion. Revisit the income support scheme for regional students attending regional

institutions.

6.3 Emotional Influences

Across all cohorts and institutions, stress was reported as the most prevalent reason students consider early departure (Edwards & McMillan, 2015) making the emotional health and wellbeing of all students a critical issue for all universities. Students from equity groups were significantly more likely than metropolitan students to cite emotional health as a reason for considering deferring or withdrawing from university, (84 per cent and 66 per cent respectively) (Baik et al., 2015) increasing the urgency of responding to the emotional health and wellbeing of students enrolled at RUN universities.

Emotional health and wellbeing among regional students is impacted by factors largely unique to equity cohorts such as financial stress, isolation, and work commitments. While relocating to commence university can have positive outcomes such as the development of life skills, having a sense of 'growing up', and becoming more independent (King et al., 2015), relocating students also face isolation from financial and emotional support networks. This can resulting in emotional stress, challenging successful transition and ultimately completion of a higher education award (Cardak et al., 2017).

Regional students who are the first in their family to attend university represent a significant proportion of enrolments (37 per cent compared with 27 per cent of metropolitan students) (Baik et al., 2015). The emotional wellbeing of regional first in family students will be further exacerbated by the demands of engaging in an unfamiliar new environment, establishing new friendships and developing a sense of belonging, as well as attempting to balance work or family commitments (King et al., 2015). These students may experience a sense of alienation in the university environment, compounding emotional stress and ultimately impacting upon academic success and continued participation (King et al., 2015).

6.3.1 Mitigating Emotional Influences

The main reason for students from equity group backgrounds considering early withdrawal is emotional stress (Baik et al., 2015) contributed to by financial stress, isolation, work commitments and navigating sociocultural incongruity. Thus, addressing emotional health requires a multifaceted and sustained approach that comprehensively supports students in all aspects of their higher education experience. Enhancing the emotional and psychosocial experiences of students increases student engagement and reduces the impact of previous disadvantage (Nelson, Readman, & Stoodley, 2016). Mitigating the disadvantage experienced by equity groups includes implementing compensations for geographical barriers, financial constraints, and sociocultural incongruities.

Accommodation of the social and emotional experiences of equity students in higher education is critical to the ongoing sustainability of RUN universities. The Office of Learning and Teaching commissioned project 'Shaping the 21st Century student experience at regional universities' found that the design and implementation of interventions for disadvantaged students should incorporate positive psychosocial influences to increase student engagement and reduce the impact of previous disadvantage and structural risk factors (Nelson et al., 2016). In support of student wellbeing, Federation University offers a 'Pathways to Success' program providing weekly support, mentoring, advice and coaching aimed at improving retention for low SES students and contributing to positive student wellbeing and belonging.

Positive early encounters with higher education institutions also led to positive psychosocial and emotional responses, thus triggering enhanced motivation, skills, self-efficacy and identity (Nelson et al., 2016). First encounters between regional students and their university should be designed to intentionally enhance the emotional and psychosocial experiences of students. The design of early encounters of higher education experiences should incorporate structural and community partnerships, and critically, be developed in partnership with students. One such example of positive early encounters is the University of Newcastle 'Children's University', offering various 'learning destinations' and an on-campus graduation day (Wood et al., 2017). The program aims to promote successful and satisfying experiences of higher education.

Multi-level partnerships that deliver initiatives through scaffolded age and context specific ways can be used to combat sociocultural incongruity. For example, developing partnerships between students and institutions, even prior to enrolment develops students agency (Devlin, 2013). Partnerships facilitate collaborative design of the learning environment such as early encounters, curriculum, emotional and psychosocial experiences and sociocultural engagement relevant to the experiences of students from equity groups.

Partnerships can also be established with families and communities to promote positive emotional and psychosocial experiences for students. These partnerships enhance student support networks and work to mitigate intergenerational disadvantage through incorporating families and communities within the experiences of higher education. For example, initiatives such as family friendly orientation and transition activities, ongoing on-campus activities, information sessions and network events create opportunities to secure positive networks and partnerships.

6.3.2 Recommendations

The following recommendations are made to promote positive emotional experiences of higher education:

Recommendations for Institutions:

- **Create a sense of belonging through partnerships with students.**
  Develop collaborative partnerships that incorporate student participation in early encounters, curriculum design, implementation and delivery, and emotional and sociocultural engagement. Promote student participation in egalitarian governance and decision making activities to emphasise agency and reduce sociocultural incongruence.
- **Engage families and communities to broaden the understanding and experience of 'going to university'.**
  Encourage family involvement in transition and participation, including participation in family-friendly orientation and transition activities, ongoing on-campus activities, information sessions and network events.

Recommendations for the Sector:

- **Support emotional wellbeing by alleviating structural disadvantages.**
  Understand the complex multiple challenges experienced by equity groups in implementing geographical, financial, emotional, and sociocultural initiatives to promote emotional wellbeing.
- **Invest in managing 'critical first encounters'.**
  Respond and enhance student emotional and psychosocial experiences through recognising the value of positive first encounters and reducing financial stress in the early stages of university enrolment.

6.4 Sociocultural Influences

The challenges experienced by equity group students are frequently compounded by complex, multiple co-existing factors. Of particular significance is the sociocultural incongruity between students and institutions. Different cultural capital, or a lack of proficiency in and familiarity with dominant institutional cultural codes and institutional practices (Devlin, 2013), compounds participation and completion for equity students and can be exacerbated by intergenerational disadvantage. While equity students are potentially rich in social and cultural experiences, this capital may not be recognised or acknowledged as valuable within the university context. It is widely recognised that social and cultural capital are key factors in explaining variation in aspiration and motivation between regional and metropolitan students (Alloway & Dalley-Trim, 2009; Kilpatrick & Abbott-Chapman, 2002). However, aligning student cultural characteristics in deficit way (for example, a lack of aspiration or motivations) fails to acknowledge the existence of systematic and intergenerational disadvantage that equity group students experience. The onus of navigating incongruent sociocultural spaces needs to be relocated to institutions to provide more support for non-traditional students (Bamber & Tett, 2001).

Students who are the first in their family to attend university account for 37 per cent of all regional enrolments (Baik et al., 2015). While not identified as an official equity group, first in family students are likely to have compounding characteristics such as having a regional or low SES background or being

Indigenous. King et al. (2015) found that the educational disadvantage experienced by first in family students is contributed to by the sociocultural incongruence between students and higher education institutions. Additionally, first in family students experience significant educational disadvantage as they navigate unfamiliar academic spaces without the advantage of generational insight and experience (Devlin, 2013; King et al., 2015). For some first in family students, the act of enrolling in university potentially challenges their family and community norms. Baik (2015) found that 48 per cent of low SES students reported that their parents had little understanding of what they did at university, and thus, the formation of new academic identities may conflict with previous family identities (King et al., 2015). The process of transitioning from pre-student to student may therefore impact student wellbeing (Cardak et al., 2017).

For students from equity groups, intergenerational disadvantage may create a void free of role models who champion education. Reporting on the Longitudinal Survey of Australian Youth, Cardak et al (2017) conclude that the educational attainment expectations of parents differs between locations. They found that regional parents held lower expectations of their children attending university (59 per cent for daughters and 40 per cent for sons) compared with metropolitan parents (78 per cent for daughters and 62 per cent for sons). Further, when considering the influence of role models, Alloway and Daly-Trim (2009) found regional communities had a greater focus on helping young people find employment rather than considering higher education.

Students from equity groups endure significant and multiple disadvantages that challenge access, participation and completion in higher education. It is essential for institutions to reject a deficit discourse of equity students and embrace a heterogeneous conceptualisation that sees all students enriching the academic environment. Some measure of success has been achieved by RUN universities in mitigating sociocultural incongruity, and this is reflected in the more homogenised grouping of completion across all cohorts. For example, SES status has a comparable impact on completion at RUN universities with the difference between high and low SES being only 0.2 per cent, compared with metropolitan universities where the difference in completion is a more significant 7.6 per cent.

6.4.1 Mitigating Sociocultural Influences

Mitigating the disadvantage of sociocultural incongruity is of particular importance for RUN universities given the multiple equity characteristics and structural challenges faced by student cohorts. The report 'Shaping the 21st Century student experience at regional universities' proposed that improving achievement, satisfaction and retention outcomes for current regional students had the potential to redress inherent inequalities through breaking intergenerational cycles of disadvantage, and bridging the sociocultural incongruence between underrepresented groups and university cultures and systems (Nelson et al., 2016).

Bridging sociocultural incongruence between underrepresented groups, and university cultures and practice can generate enduring change (Nelson et al., 2016). Mitigating generational disadvantage resulting from sociocultural incongruity requires a multifaceted approach. Investing in early encounters, developing community and student partnerships and promoting positive emotional and psychosocial experiences in higher education promotes achievement, satisfaction and retention. This cycle sustains student engagement and success through the bridging of sociocultural incongruity, enhanced support networks, increased partnership opportunities and improves sociocultural and emotional experiences of higher education. Some institutional initiatives that support this positive cycle include the promotion of existing institutional support mechanisms, demonstrating respect for all students, responding to student wellbeing, and demonstrating empathy to life-load, financial and access challenges (Devlin, Kift, Nelson, Smith, & McKay, 2012).

To mitigate the disadvantage experienced by equity group students, an understanding of the complex access, participation, and retention challenges experiences is critical. Continuing research into the factors that contribute to student disadvantage creates a more nuanced view of how students experience university, and how the higher education system can respond in alleviating that disadvantage. Many regional universities are aware of the necessity of this research. For example, La Trobe University leads research from the Centre for Higher Education and Diversity Research, providing analysis and information on strategies for improving access and achievement for equity group students. The University of Newcastle, in collaboration with the University of Melbourne conducts research at the Centre of Excellence for Equity in Higher Education aimed at planning, monitoring and

evaluating equity programs (Wood et al., 2017). The University of the Sunshine Coast, in collaboration with the Office of Learning and Teaching and other RUN universities partners recently conducted research on the engagement initiatives of regional universities (Nelson et al., 2016). Further research aimed at aligning institutional strategy with HEPPP initiatives can provide appropriate direction for the policy and funding context (Wood et al., 2017). This includes provision for evaluation cycles to guide future planning, funding and implementation of initiatives.

6.4.2 Recommendations

The following recommendations are made to promote an equitable higher education system:

Recommendations for Institutions:

- **Respond to students' challenges by enabling constructive cycles of learning.**
  Continue to develop cultural, structural and practical organisational initiatives that target student achievement, satisfaction and retention.

Recommendations for the Sector:

- **Mitigate intergenerational disadvantage.**
  Support a multifaceted approach of investing in and promoting positive early encounters, peer and institutional partnerships leading to positive emotional and psychosocial experiences.
- **Establish and maintain constructive engagement with regional communities.**
  Sustain student engagement and success through bridging sociocultural incongruity, improving student psychosocial and emotional experiences and promoting achievement, satisfaction and retention.
- **Continue to support relevant research.**
  Support future research that continues to develop knowledge on the experience of higher education for equity group students and promotes the mitigation of factors that cause disadvantage.

6.5 Enrolment Characteristics Influences

Studying by distance is a familiar style of educational delivery for many Australians. Significant growth in online delivery of higher education indicates a response to reducing costs, while increasing the access and convenience of higher education for regional communities (Cardak et al., 2017). RUN universities have significantly more students enrolled externally compared to metropolitan universities (43.1 per cent and 3.2 per cent respectively, see Appendix 5). In both RUN universities and metropolitan universities and across all cohorts and tracking periods, external students have poorer outcomes than internal and multi-modal students. External enrolment, compounded by low SES background reduces completion to 41.3 per cent (see Appendix 6).

Similarly, RUN universities enrol significantly more part-time students compared to metropolitan universities (33.9 per cent compared to 11.5 per cent). Students enrolled on a part-time basis have poorer outcomes than full-time students at both RUN and metropolitan universities. For example, 2006 commencing students at RUN universities enrolling on a part-time basis have a completion rate of 41.7 per cent compared with 63.1 per cent for RUN students who are enrolled on a full-time basis. These patterns are consistent with national level results (Department of Education and Training, 2016).

Part-time enrolment is significantly compounded by multiple equity group membership. The First Year Experience survey (Baik et al., 2015) found part-time enrolment more likely for students from regional backgrounds (12 per cent compared to seven per cent at metropolitan universities), low SES backgrounds (10 per cent compared to five per cent of high SES students) and students with disability (14 per cent compared to seven per cent of non-disabled students). For low SES students who are more likely to have to work while studying, the compounding effect of part-time enrolment significantly reduces rates of completion to 38.9 per cent (see Appendix 3).

The decision to enrol in a part-time capacity is impacted by factors related to student finances, such as the necessity of working and family commitments. For example, 59 per cent of low SES students reported that their work commitments interfered with their studies (Baik et al., 2015). The compounding

demographic and enrolment characteristics of student cohorts at RUN universities presents a significant challenge for completion outcomes.

6.5.1 Mitigating Enrolment Characteristics Influences

Various enrolment characteristics influence completion, but any type of enrolment or study contributes to valuable student outcomes. Recent research indicates that even where individuals do not complete a degree, they are likely to fare better in the labour market than if they do not enrol at all (Schnepf, 2017). For some students, committing to the equivalent of three years of full-time study to gain a bachelor degree qualification may not be feasible or possible due to geographic, financial and life-load constraints. Recent research recommends sub-bachelor places such as higher education diplomas and associate degrees be offered to better accommodate the structural limitations of equity group students (Brett, Sheridan, Harvey, & Cardak, 2015; Devlin & McKay, 2017). Devlin (2017) also suggests offering flexible qualifications such as multiple exit point qualifications and micro credentials to better support the patterns of enrolment and participation typical of equity group students. However, this strategy must be approached with caution to avoid a deficit-based assumption that students from equity backgrounds have reduced ability to complete and compete in traditional higher education. The implementation of flexible qualifications and micro-credentials is yet to be realised in Australian higher education. However, CQUniversity offers 'the Accessible Online Delivery Project' to accommodate the challenges and diversity that students experience by offering flexibility to the pace and delivery of education (Wood et al., 2017).

A progressive certification system that recognises key milestones reached while leading to degree completion is one way of certifying achievement and reducing non-completions.

6.5.2 Recommendations

The following recommendations are made to institutions and to the sector in promoting flexible access:

Recommendations for Institutions:

- **Offer greater flexibility in learning and assessment design and strategies.**
  Support flexible learning and assessment strategies that recognise the lived reality of regional students. Flexibly schedule programs of study to align with structural challenges and cohort needs.

Recommendations for the Sector:

- **Recognise flexible progression pathways and nested qualifications.**
  Support regional participation in higher education through multiple entry and exit points, scaffolded awards, and micro-credentials to provide students with alternative ways of completing a higher education qualification.

7. Conclusion

The six universities that form the RUN group play an important role in providing access to higher education for the 30 per cent of Australians who live in regional communities. Regional universities make significant contributions to the nation's knowledge-based economy and are major contributors to regional employment and cultural enrichment. This report has focused on providing cogent explanations for the completion patterns of students at RUN universities by synthesising knowledge on the characteristics of equity groups and the compounding effects of structural influences on multiple equity group membership, which is the lived reality experienced by cohorts at RUN universities.

In the introduction of this report, three research questions were stated. We frame our concluding comments by revisiting these research questions, and by summarising the recommendations made throughout this report.

7.1 Revisiting the Research Questions

7.1.2 Why do Completion Patterns Differ between Metropolitan Universities and RUN Universities?

RUN universities have higher enrolments of students from all equity groups. Students from equity groups face a number of structural challenges in accessing, participating and completing higher education. These structural challenges include geographical location, financial constraints, emotional factors and sociocultural incongruity. Additionally, for many equity group students these structural disadvantages are compounded by multiple equity group membership. We contend that in combination, structural and compounding equity factors present significant challenges and explain the different completion rates of regional students, and in particular regional students who are members of one or more equity groups.

7.1.2 How do Equity Group Characteristics Impact on Student Access, Participation and Completion at RUN Universities?

We found that several key influences contribute to access, participation and completion of equity students at RUN universities. Those influences are geographical, financial, emotional and sociocultural. These structural challenges act in complex inter-connected ways to influence the enrolment patterns of regional students and enrolment patterns such as part-time or external are associated with lower completion rates. Geographical influences include challenges to access through travel constraints and a lack of access to critical resources such as reliable, high speed internet. Financial influences include affordability of living expenses and the necessity to work whilst studying, all of which significantly contribute to stress. Emotional influences include stress and wellbeing and are triggered by financial stress, and isolation from support networks. Sociocultural influences include challenges to developing a sense of belonging and navigating sociocultural incongruities.

7.1.3 What can be done to Mitigate Previous Disadvantage to Enable the Completion of RUN University Students?

Achieving institutional or student parity in completions is a challenge. Of even greater challenge is achieving a fully equitable higher education system. Across the Australian sector, and for RUN universities in particular, HEPPP/HEPP funding has increased access to higher education for students for whom university would otherwise be unimaginable. The proposed continuation of HEPPP in the Government's 2017 Budget is welcomed by RUN universities to help sustain valuable equity initiatives and to develop new initiatives to mitigate long standing disadvantage. However, current policy and practice-based initiatives do not completely mitigate intergenerational disadvantage, sociocultural incongruence and the structural challenges faced by students with multiple equity group membership.

To a significant degree, RUN universities have been highly successful in mitigating disadvantage, as is indicated by comparable completion rates across all cohorts. The majority of RUN students successfully graduate from bachelor degrees. Furthermore, RUN university students from equity groups have completion patterns that replicate the completion patterns of non-equity students enrolled at RUN universities, demonstrating some success in mitigating disadvantage. A high level of student satisfaction with the quality of teaching and learning is also achieved at RUN universities. Nevertheless, disparities between the completion rates of RUN cohorts and metropolitan cohorts remain and can be explained by the structural challenges discussed in this report.

Factors that contribute to completion rates for RUN students are complex and multifaceted. Comparing the completion rates of RUN universities and metropolitan universities provides little insight into the experience of higher education for equity group students. Recognising the complex challenges encountered by equity group students in completing university facilitates the application of measures that counter disadvantage and promote an equitable system of higher education.

7.2 Summary of Recommendations

Throughout this report, the following recommendations are made for both institutions and the higher education sector:

Recommendations for Institutions:

- Continue community and family outreach programs to further develop responsive student support networks.
- Offer flexible access to learning resources and diversify curriculum structures, delivery modes and schedules.
- Provide financial subsidies to reduce stress and remove barriers for individual students.
- Create a sense of belonging through partnerships with students.
- Engage families and communities to broaden the understanding and experience of 'going to university'.
- Respond to students' challenges by enabling constructive cycles of learning.
- Offer greater flexibility in learning and assessment design and strategies.

Recommendations for the Sector:

- Increase investment in regional schools and widening participation programs.
- Continue to build partnerships to enhance regional infrastructure and communities.
- Focus on building economic stability in regional communities.
- Promote emotional wellbeing through compensating disadvantage.
- Invest in managing 'critical first encounters'.
- Mitigate inter-generational disadvantage.
- Establish and maintain constructive engagement with regional communities.
- Continue to support relevant research.
- Recognise flexible progression pathways and nested qualifications.

Understanding the structural factors that impact upon access, participation and completion of equity groups at RUN universities is essential to student success and the future sustainability of regional higher education. Comparing RUN universities to metropolitan universities provides little insight into success, and fails to recognise the structural characteristics that challenge equity group students. In developing a more nuanced view of the challenges experienced by equity group students, valuable research contributions and initiatives can continue to improve student outcomes and mitigate disadvantage.

7.3 Questions Arising and Further Research

The purpose of this study was to understand the completion patterns of students at RUN universities. This purpose has been achieved by addressing the research questions, originally set out in the introductory section (Section 1) and discussed as a series of key points throughout the report. Those key discussion points are summarised in Section 7.1 above.

Nevertheless, in understanding these issues, further questions have arisen. Some questions relate to the two major limitations of the current study, while others require further and different forms of analysis. The first limitation of the current study relates to the nature of the data specification and the resulting data set provided.

- The data set requested from the DET contained details of the cohorts at RUN and metropolitan universities. The data set did not allow analysis of the completion patterns of equity cohorts within various sub-groups groups of the metropolitan universities (for example, including or excluding Go8 Universities and/or regional universities located in large metropolitan areas such as Newcastle or Wollongong). A further data request would need to have been made and completions analyses conducted to report these details. Such analysis was beyond the scope of this study.

- The DET cohort completion reports indicate that a continuum of completion patterns exist, rather than identifiable patterns related to specific clusters of institutions. A further analysis of the continuum of institutional completions may reveal patterns related to institutional age, population size and density, distance from capital city GPO and similarities and differences in institutional catchment areas.

A second limitation of the current study is the lack of information pertaining to quality and extent of the student experience practices at RUN universities.

- Drawing on other contemporary research, this study asserts that practices at RUN universities are exemplary. However, the reality is that no institutions currently provide comprehensive reports on the extent and nature of their practices to mitigate previous disadvantage and structural issues. The second issue arising from this limitation is a question about whether such a comparison would in fact be useful given the context specific nature of sociocultural, financial and structural disadvantage.

- Nevertheless a mechanism does exist that could provide a way of institutions managing the development of their practices in the form of the Student Engagement Success and Retention Maturity Model (Nelson et al, 2015). The SESR-MM is an approach to assessing the collective capability (maturity) of institutional SESR practices. The SESR-MM could be used to illustrate the maturity of RUN practices and triangulate institutional reported data currently obtained via the SExpS, which indicates the quality of the student experience in RUN universities is equivalent to the national SExpS data. The development of a comprehensive SESR for each of the RUN universities is beyond the scope of the current study.

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Appendix 1

RUN Cohort Completions Analysis

Data for this analysis was drawn from two sources: cohort tracking data derived from the Higher Education Student Collection; and the 2015 Student Experience Survey. The cohort tracking data was used to document and compare patterns of completions among RUN students and students attending metropolitan universities. This analysis formed the basis of the report. In order to provide further understanding of the completion patterns of RUN students, data from the Student Experience Survey was used to explore the experiences of various groups while at university, whether they have seriously contemplated leaving their institution before the completion of their qualification, and the reasons underlying withdrawal intentions.

Cohort Tracking Data

Measurement of Student Outcomes

The Higher Education Student Collection is national level administrative data held by the Commonwealth Department of Education and Training. The Department has developed a cohort-tracking methodology that uses a unique student identifier – the Commonwealth Higher Education Student Support Number – to track individuals in the HESC over a number of years. The CHESSN is allocated to higher education students in Australia who receive a Commonwealth-supported place or finance through the Higher Education Loan Program. As this identification number remains with a student throughout their academic life, even if they change courses or institutions, the Department has been able to construct a comprehensive picture of the pathways followed by higher education students over a number of years.

Using this approach, the Department has identified seven student outcomes:
- completed by the end of the tracking period, at the same Higher Education Provider
- completed by the end of the tracking period, at a different HEP
- still enrolled at the end of the tracking period, at the same HEP
- still enrolled at the end of the tracking period, at a different HEP
- re-enrolled, same HEP, but dropped out before the end of the tracking period
- re-enrolled, different HEP, but dropped out before the end of the tracking period
- never came back after first year (dropped out in first year or had not returned after first year).

These outcomes can be aggregated into four categories for reporting purposes:
- completed
- still enrolled
- dropped out sometime after first year
- never returned after first year.

'Completion' in the aggregated measure refers to whether a student had completed a bachelor degree within the period of analysis. This completion may not necessarily be in the same course or at the same institution that the student commenced. For example, a student who commenced a Bachelor of Arts but changed course and completed a Bachelor of Commerce at a different university would be classified as 'completed'. Similarly, the 'still enrolled' group in the aggregated measure includes students who at the end of the tracking period had not completed a degree but were enrolled in an award course. This course may be different from the one in which they first commenced. Students who completed a bachelor degree and subsequently enrolled in a further degree such as master's or PhD are classified as 'completed'.

Outcomes can be further aggregated in various ways for analyses involving small groups or to facilitate presentation of analysis involving several variables or cohorts. In this report, two dichotomous aggregate measures are utilised:

- completed/other
- engaged/other, where students 'engaged' with higher education include students who are still enrolled as well as students who have completed (DET, 2015).

The number of years a student takes to complete a degree varies, with the number of additional students who complete a course declining with each additional year following commencement.[8] While it is possible to focus on *completions* when tracking students over relatively long periods (for example, nine years), a focus on e*ngagement* with higher education is more appropriate when tracking students over shorter periods of time (for example, four years).[9]

Selection of Cohorts and Tracking Periods

Analysis is based on commencing domestic bachelor degree students at Table A universities. The Department of Education and Training has tracked a number of cohorts of commencing students over various time periods (Table 6).

The focus of this report is on the 2005 and 2006 commencement cohorts, tracked over nine years. Supplementary analysis, based on these and subsequent cohorts of commencers tracked over a shorter four year period, were also undertaken. These include students commencing in 2005, 2006, 2007, 2008, 2009, 2010 and 2011.

The longer nine year tracking period facilitates a focus on completions but is restricted to the two oldest cohorts (students commencing in 2005 and 2006, prior to the announcement of the demand-driven system). The four year tracking period allows an examination of seven cohorts of commencing students, including two cohorts commencing after the easing of caps on over-enrolments ahead of the introduction of the demand-driven system. It is too early to use the tracking methodology to examine engagement or completions among students commencing in 2012, the first cohort to experience the demand-driven system throughout their entire university life. However, the availability of two cohorts tracked over nine years and these and more recent cohorts tracked over four years does facilitate an assessment of whether there are noticeable differences in the progression of students in different cohorts, as well as providing some indication of whether the nine year data from the older cohorts can be generalised across the more recent cohorts.

Table 6: Cohorts included in the Commonwealth Department of Education and Training cohort tracking datasets

Notes: # Number of commencing students included in cohort data

^ Tracking periods used in this project

Cohort commencement year	Years tracked				Number of commencing students#	
	Four years^	Six years	Eight years	Nine years^	National	RUN
2005	2005-2008	2005-2010	2005-2012	2005-2013	165,905	16,355
2006	2006-2009	2006-2011	2006-2013	2006-2014	167,214	15,413
2007	2007-2010	2007-2012	2007-2014	-	170,485	15,912
2008	2008-2011	2008-2013		-	170,021	15,716
2009	2009-2012	2009-2014		-	182,731	17,120
2010	2010-2013	-		-	194,472	18,225
2011	2011-2014	-		-	199,991	18,564
2012	-	-	-	-	-	-

Over-enrolment caps increased →

Demand-driven system →

of Analysis

The Commonwealth Department of Education and Training holds the cohort-tracking data and has used it to produce three national cohort reports containing broad national level statistics relating to

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[8]Among students who commenced a bachelor degree in 2005, 47.3 per cent of students completed within four years. By five years after commencement, an additional 12.8 per cent of students had completed, falling to an additional 1.2 per cent between eight and nine years after commencement (DET, 2015, Chart 2 & Table 2).

[9] Support for the validity of this approach can be found in the 2006 cohort of commencing students. At the national level, the completion rate rose from 46.7 per cent within four years of commencement to 73.5 per cent within nine years while the proportion of students still studying fell by 28.5 percentage points over the same period. Overall, the proportion of students engaged in higher education (still studying and completed categories combined) remained relatively stable across the two tracking periods (77.7 per cent 79.4 per cent).

completion rates of undergraduates (DET, 2015, 2016; DOE, 2014). Most of the national level statistics used in this report were drawn from those publications. In addition, the project team requested additional cross-tabulations from the Department of the cohort tracking data to enable more specific exploration of completions in RUN universities and among the targeted equity groups. Most of the additional analyses allowed for bivariate exploration of student characteristics and completions within RUN universities, and in some cases, multivariate cross-tabulations have been made available. Detailed results are provided for three equity groups (low SES, regional/remote and Indigenous) and limited, broad level analysis is provided for the disability group.

Student Experience Survey Data

The findings on completions based on the cohort tracking data were supplemented by analysis of the Student Experience Survey. Formerly known as the University Experience Survey, this is an annual survey of on-shore commencing and later-year undergraduate students which has been conducted nationally since 2012. It is designed to measure levels of engagement and satisfaction among currently enrolled students, with a focus on aspects of the student experience which are: 'measureable'; linked to learning and development outcomes; and amenable to institutional influence' (Social Research Centre, 2015, p.9). Analysis of the 2015 Student Experience Survey was undertaken by the project team.

Classifying Universities

For the purposes of this project, universities are classified into three groups: RUN universities; universities headquartered in mainland state capitals ("metropolitan universities"); and other (non-RUN regional) universities. The details of this classification are provided in Table 7. RUN universities are the focus of this report, and results for RUN universities are compared with those for universities headquartered in mainland state capitals. While national level statistics presented in this report include non-RUN regional universities, results are not presented separately for this group.

Table 7: Classification of Table A Providers

University classification used in report	Table A providers
Regional University Network	Central Queensland University
	Federation University Australia
	Southern Cross University
	University of New England
	University of Southern Queensland
	University of the Sunshine Coast
Universities headquartered in mainland state capitals ("metropolitan universities" comparison group)	Australian Catholic University
	Curtin University
	Deakin University
	Edith Cowan University
	Flinders University
	Griffith University
	La Trobe University
	Macquarie University
	Monash University
	Murdoch University
	Queensland University of Technology
	RMIT University
	Swinburne University of Technology
	The Australian National University
	The University of Adelaide
	The University of Melbourne
	The University of Queensland

University classification used in report	Table A providers
	The University of Sydney
	The University of Western Australia
	University of Canberra
	University of New South Wales
	University of South Australia
	University of Technology, Sydney
	Victoria University
	Western Sydney University
Other universities	Batchelor Institute of Indigenous Tertiary Education
	Charles Darwin University
	Charles Sturt University
	James Cook University
	University of Newcastle
	University of Tasmania
	University of Wollongong

Defining and Measuring Equity Groups

Four equity groups are examined: students from low socioeconomic backgrounds; students from regional and remote backgrounds; Indigenous students; and students with a disability. Details for each of these groups is provided in Table 8. The definition and measurement of each of these groups was limited by what was available in the Commonwealth Department of Education and Training's cohort tracking data, which in turn was limited by what was collected through administrative student enrolment systems when each student first enrolled.

The Student Experience Survey data do not include variables identifying all the equity groups examined in this report. However, the Commonwealth Department of Education and Training was able to provide the researchers with additional contextual information about the survey respondents which facilitated the identification of equity groups within the survey data in a manner comparable to the identification of equity groups within the cohort tracking data.

Table 8: Measurement of equity groups in the cohort data and the Student Experience Survey

Equity Group	Measurement
Low SES	Socioeconomic status (SES) is based on the postcode of permanent home residence of the student at the commencement of their studies. The SES value is derived from the Socioeconomic Indexes for Areas (SEIFA) Index of Education and Occupation for postal areas. Postal areas in the bottom 25 per cent of the population aged 15-64 are classified as low SES.
Regional and remote	Regional and remote categories are derived from mapping postcode of permanent home residence of the student at the commencement of their studies onto the Ministerial Council on Education, Employment, Training and Youth Affairs (MCEETYA) geographic classification. In the broad analyses for the report, results are reported separately for regional and for remote students. In the more detailed analyses, these two groups are collapsed into one non-metropolitan group (referred to in the text as "non-metro") so as to avoid issues of confidentiality and small cell sizes that would have prevented reporting within the remote group.

Indigenous	Indigenous includes all students identifying as Aboriginal and /or Torres Strait Islander.
Disability	Disability includes all students who indicated that they had a disability, impairment or long term medical condition which may affect their study.

Other Variables

Other demographic and enrolment characteristics that have been associated with completions at the national level are also analysed in this report. Mode of attendance (internal, external, multi-modal) and type of attendance (full-time, part-time) are of particular relevance to RUN universities and are analysed in detail. Aspects of transition pathways (such as basis of admission and ATAR band), field of education, age and gender are also reported. Each of these variables is based upon the situation of the student at the time of the commencement of their degree.

Appendix 2

| National 73.5% |
| RUN universities 55.2% |

| RUN uni & multi-modal 65.1% |

| RUN uni & internal 61.8% | | RUN uni & metro background 51.6% | | RUN uni & full-time 63.1% |

| RUN uni & external 44.3% | | RUN uni & non-metro 57.8% | | RUN uni & part-time 41.7% |

| RUN uni & non-metro & external 42.7% | | RUN uni & non-metro & part-time 41.2% |
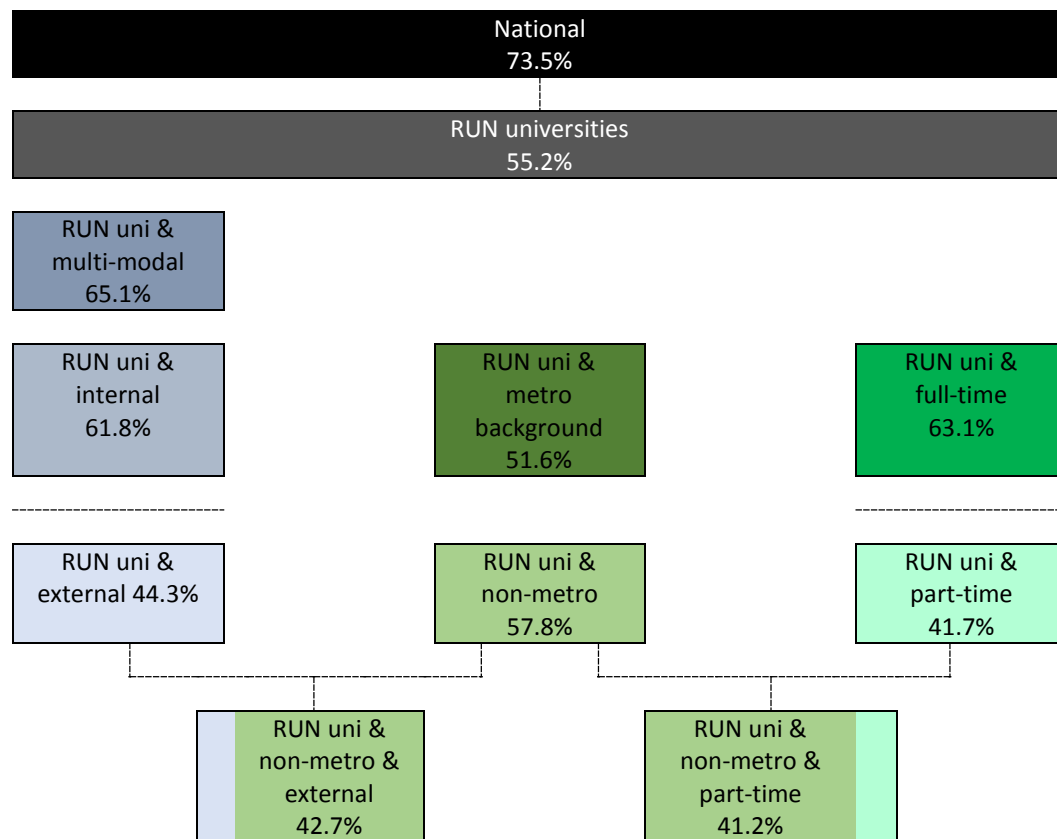
Figure 6: Completion rates, nine years after commencement, by university type, residential location, mode of attendance and type of attendance, for domestic bachelor students commencing in 2006

Appendix 3

National 73.6%		

		High SES 77.8%
Full-time 78.3%	Metro university 76.5%	Medium SES 72.3%
Part-time 49.0%	RUN university 55.2%	Low SES 67.9%
	RUN university & part-time 41.7%	RUN university& low SES 53.9%
	RUN uni & part-time & low SES 38.9%	

Figure 7: Completion rates, nine years after commencement, by university type, SES and type of attendance, for domestic bachelor students commencing in 2006

Appendix 4

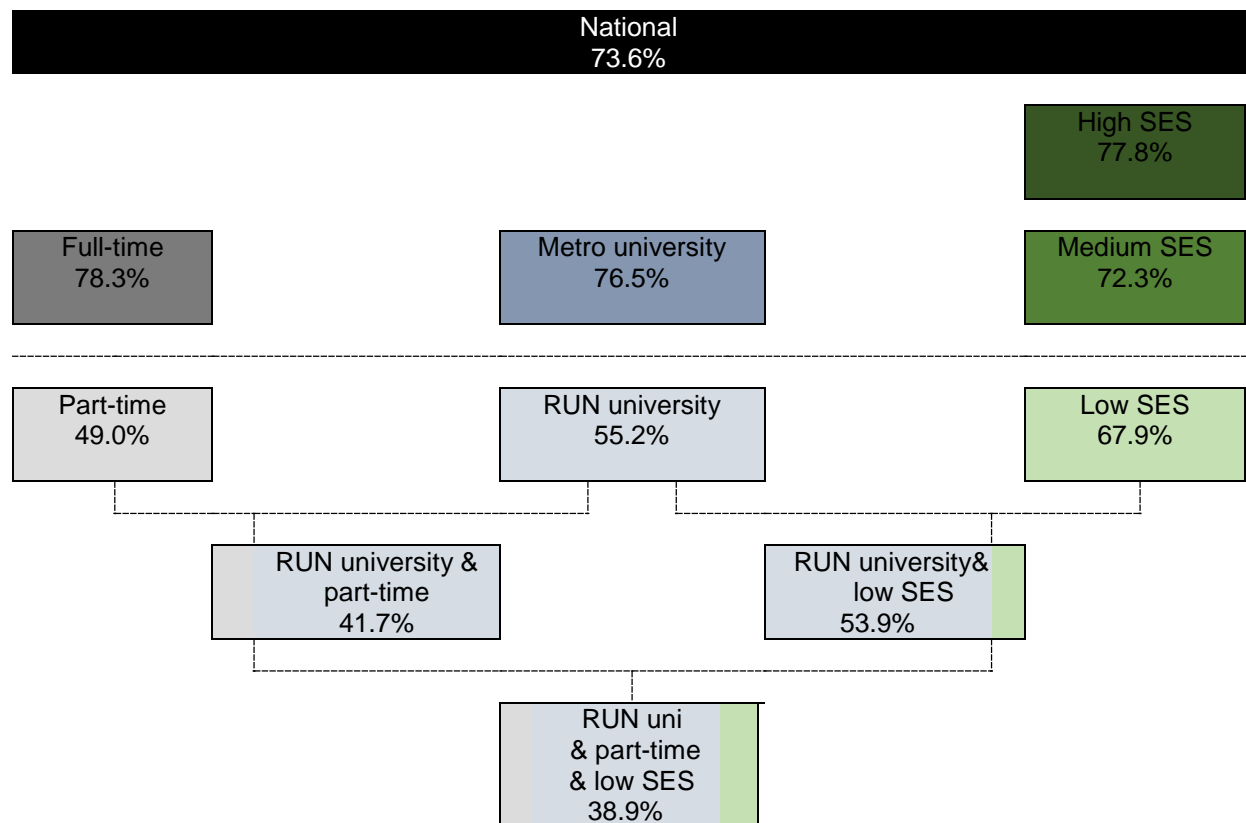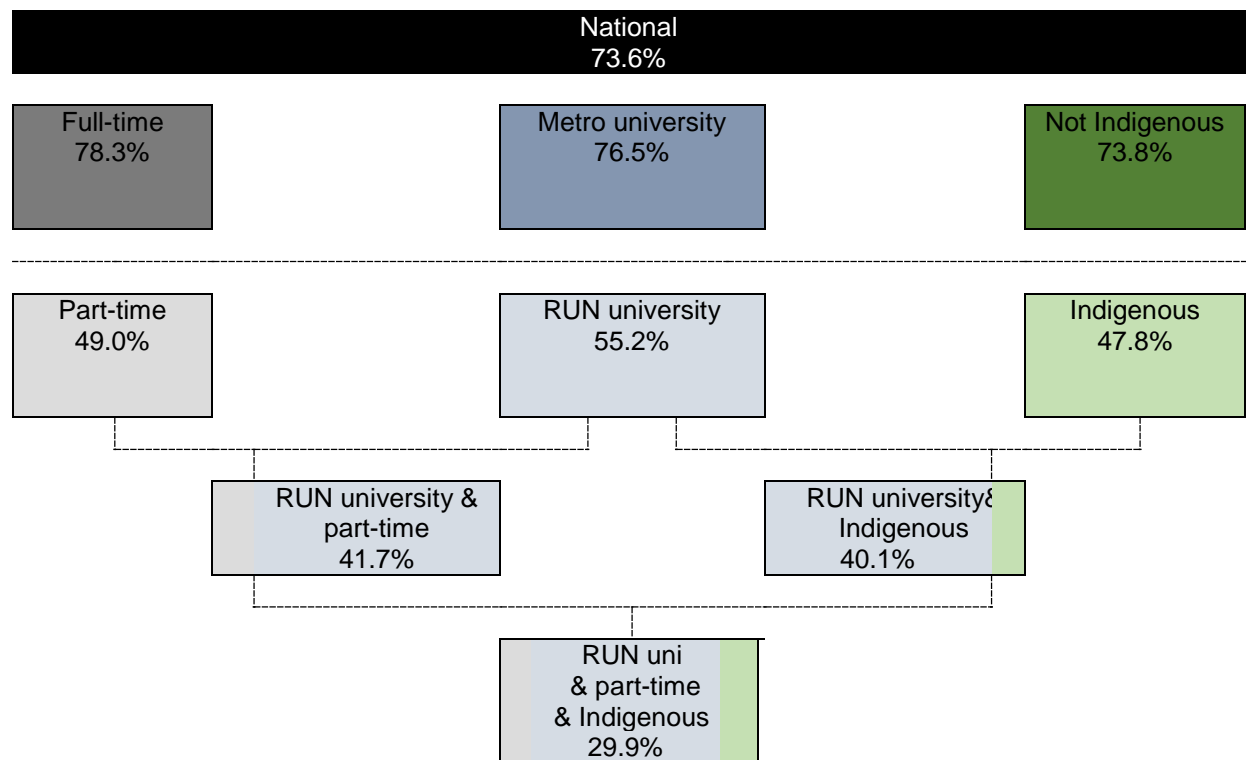| National 73.6%		
Full-time 78.3%	Metro university 76.5%	Not Indigenous 73.8%
Part-time 49.0%	RUN university 55.2%	Indigenous 47.8%
	RUN university & part-time 41.7%	RUN university & Indigenous 40.1%
	RUN uni & part-time & Indigenous 29.9%	

Figure 8: Completion rates, nine years after commencement, by university type, Indigenous status, and type of attendance, for domestic bachelor students commencing in 2006

Appendix 5

Table 9: Domestic bachelor degree commencements by year, university type and selected characteristics (percentage)

		Percentage of commencers^							Percentage point change in share (2005-11)
		2005	2006	2007	2008	2009	2010	2011	
RUN universities									
Mode of attendance	Internal	48.4	49.1	47.2	45.1	45.7	43.3	45.6	-2.9
	External	39.0	39.6	42.4	43.4	42.7	43.7	43.1	4.1
	Multi-modal	12.6	11.3	10.4	11.4	11.7	13.0	11.3	-1.2
Type of attendance	Full-time	64.0	63.3	63.8	63.3	64.8	64.6	66.1	2.1
	Part-time	36.0	36.7	36.2	36.7	35.2	35.4	33.9	-2.1
Basis for admission	Higher education	29.0	27.6	29.6	30.9	34.9	35.6	31.9	2.8
	VET^	31.6	32.3	31.7	30.1	28.9	29.2	29.4	-2.2
	Secondary education	11.0	10.9	10.3	11.0	9.8	10.9	14.6	3.6
	Other basis	28.3	29.2	28.3	28.0	26.4	24.3	24.2	-4.1
ATAR band (school leavers only)	30-49	0.2	0.3	0.0	0.4	0.5	0.2	0.4	0.2
	50-59	1.2	2.4	0.8	1.9	1.4	1.1	1.4	0.1
	60-69	5.3	5.3	4.4	6.4	5.2	3.3	4.6	-0.7
	70-79	6.1	4.9	5.0	5.9	5.8	6.4	6.6	0.5
	80-89	4.1	3.6	4.3	5.2	5.1	4.2	4.6	0.6
	90-94	1.2	1.5	1.6	2.0	1.6	1.6	1.8	0.6
	95-100	0.6	0.5	0.7	0.7	0.8	0.7	0.7	0.1
	ATAR not provided or not required	81.3	81.4	83.2	77.4	79.5	82.6	79.9	-1.4
Field of education	Natural and Physical Sciences	6.5	6.2	5.7	6.2	6.1	7.3	8.3	1.7
	Information Technology	2.9	2.8	2.8	2.5	2.6	2.6	2.6	-0.3
	Engineering and Related Technologies	4.3	4.0	3.9	4.5	4.1	3.7	3.7	-0.6
	Architecture and Building	1.4	1.5	1.6	1.4	1.4	1.1	1.3	-0.1
	Agriculture, Environ and Related Studies	2.6	2.5	2.4	2.6	2.9	2.5	2.9	0.3
	Health	11.6	11.9	13.2	13.5	14.1	16.7	17.7	6.1
	Education	18.2	18.7	19.1	18.1	21.6	19.8	18.8	0.6
	Management and Commerce	21.8	21.3	20.4	19.8	17.5	16.2	15.7	-6.1
	Society and Culture	22.9	23.7	24.1	24.8	23.2	23.2	22.3	-0.6
	Creative Arts	7.6	7.4	6.8	6.6	6.6	6.9	6.7	-0.9
	Food, Hospitality and Personal Services								
Gender	Male	38.3	36.2	35.1	34.0	33.6	33.1	33.3	-5.0
	Female	61.7	63.8	64.9	66.0	66.4	66.9	66.7	5.0
Age	19 and under	40.7	41.0	39.0	37.8	36.5	36.5	37.2	-3.5
	20-24	21.0	21.3	21.0	21.2	21.3	20.7	21.3	0.3
	25 and over	38.4	37.8	40.0	41.1	42.3	42.9	41.5	3.1

Table 9 continued

		Percentage of commencers							Percentage point change in share (2005-11)
		2005	2006	2007	2008	2009	2010	2011	
Metropolitan universities									
Mode of attendance	Internal	91.9	92.4	92.6	91.9	92.6	92.0	91.6	-0.3
	External	3.6	3.0	2.8	2.7	3.0	3.0	3.2	-0.3
	Multi-modal	4.5	4.6	4.6	5.3	4.4	5.0	5.2	0.7
Type of attendance	Full-time	86.4	87.3	87.7	88.2	88.3	88.6	88.5	2.1
	Part-time	13.6	12.7	12.3	11.8	11.7	11.4	11.5	-2.1
Basis for admission	Higher education	25.0	22.3	22.1	22.2	22.9	23.4	23.9	-1.1
	VET^	49.1	51.6	55.1	55.1	54.2	54.1	53.9	4.9
	Secondary education	10.0	9.6	10.0	9.8	9.5	10.0	10.5	0.4
	Other basis	15.9	16.5	12.8	13.0	13.4	12.5	11.7	-4.2
ATAR band (school leavers only)	30-49	0.2	0.3	0.2	0.2	0.3	0.2	0.4	0.1
	50-59	1.0	1.4	1.5	1.4	1.7	1.5	1.9	0.9
	60-69	4.4	5.5	5.7	5.3	5.5	5.4	5.2	0.8
	70-79	9.1	9.3	10.2	9.3	9.3	8.7	8.3	-0.8
	80-89	12.4	12.2	13.0	12.8	12.5	12.4	11.6	-0.8
	90-94	6.8	6.6	7.0	6.7	6.9	7.0	6.8	0.0
	95-100	8.1	7.5	8.3	7.8	8.0	8.4	7.9	-0.2
	ATAR not provided or not required	57.9	57.2	54.2	56.5	55.8	56.3	58.0	0.0
Field of education	Natural and Physical Sciences	10.5	10.3	10.1	10.2	10.7	11.6	11.9	1.5
	Information Technology	3.9	3.3	3.1	3.0	3.1	3.0	3.2	-0.7
	Engineering and Related Technologies	5.9	6.1	6.4	6.6	6.6	6.5	6.6	0.7
	Architecture and Building	2.7	3.0	3.1	3.2	2.9	2.9	2.9	0.2
	Agriculture, Environ and Related Studies	1.6	1.5	1.3	1.6	1.5	1.4	1.3	-0.2
	Health	12.9	13.5	14.3	14.7	14.7	15.2	15.1	2.2
	Education	9.6	9.0	8.6	7.9	7.6	7.5	7.3	-2.3
	Management and Commerce	19.2	19.3	19.3	19.7	18.2	17.0	16.9	-2.3
	Society and Culture	25.2	24.8	24.8	24.2	25.4	25.9	26.2	0.9
	Creative Arts	8.5	9.1	9.0	8.9	9.4	8.9	8.6	0.1
	Food, Hospitality and Personal Services	0.0	0.0	0.0	0.0	0.0			
Gender	Male	41.9	42.2	42.2	42.4	42.3	42.7	43.2	1.3
	Female	58.1	57.8	57.8	57.6	57.7	57.3	56.8	-1.3
Age	19 and under	61.4	63.0	64.8	65.4	64.5	64.7	64.8	3.4
	20-24	21.7	21.5	20.8	20.6	21.1	20.7	21.1	-0.6
	25 and over	16.9	15.5	14.4	14.0	14.4	14.6	14.1	-2.8

Table 9 continued

		Percentage of commencers							Percentage point change in share (2005-11)
		2005	2006	2007	2008	2009	2010	2011	
National									
Mode of attendance	Internal	85.5	86.3	85.9	84.9	85.1	83.9	84.0	-1.5
	External	8.9	8.3	8.7	8.8	9.1	9.6	9.3	0.4
	Multi-modal	5.5	5.4	5.4	6.3	5.7	6.5	6.7	1.1
Type of attendance	Full-time	82.6	83.4	83.5	83.8	84.0	84.3	84.7	2.1
	Part-time	17.4	16.6	16.5	16.2	16.0	15.7	15.3	-2.1
Basis for admission	Higher education	25.7	23.2	23.1	23.5	24.4	24.9	24.8	-0.9
	VET^	45.3	48.1	50.4	50.1	49.1	49.0	49.3	4.0
	Secondary education	10.6	10.2	10.6	10.1	9.9	10.7	11.5	0.8
	Other basis	18.3	18.5	15.8	16.4	16.6	15.3	14.4	-3.9
ATAR band (school leavers only)	30-49	0.2	0.3	0.2	0.2	0.3	0.2	0.3	0.1
	50-59	1.1	1.4	1.4	1.4	1.6	1.4	1.7	0.6
	60-69	4.2	5.3	5.4	5.3	5.3	5.0	4.9	0.7
	70-79	8.4	8.6	9.3	8.7	8.6	8.3	7.8	-0.6
	80-89	10.9	10.9	11.4	11.3	10.9	10.8	10.0	-0.9
	90-94	5.8	5.7	6.0	5.8	5.8	5.9	5.7	-0.1
	95-100	6.5	6.2	6.8	6.3	6.5	6.7	6.2	-0.3
	ATAR not provided or not required	62.8	61.6	59.5	61.0	61.1	61.7	63.4	0.5
Field of education	Natural and Physical Sciences	9.7	9.5	9.4	9.3	9.8	10.6	11.0	1.3
	Information Technology	3.8	3.3	3.0	2.9	3.0	2.9	3.1	-0.7
	Engineering and Related Technologies	5.5	5.6	5.9	6.1	6.1	6.0	6.1	0.6
	Architecture and Building	2.4	2.7	2.8	2.8	2.6	2.6	2.6	0.2
	Agriculture, Environ and Related Studies	1.8	1.7	1.6	1.8	1.8	1.7	1.6	-0.2
	Health	13.4	14.2	15.1	15.6	15.6	16.1	16.2	2.8
	Education	11.4	10.9	10.7	10.1	10.1	10.0	9.6	-1.8
	Management and Commerce	18.9	18.9	18.7	18.8	17.4	16.2	16.1	-2.9
	Society and Culture	24.7	24.5	24.3	24.0	24.8	25.5	25.5	0.7
	Creative Arts	8.2	8.6	8.5	8.5	8.8	8.4	8.2	0.0
	Food, Hospitality and Personal Services	0.0	0.0	0.0	0.0	0.0			
Gender	Male	41.1	41.1	40.8	40.8	40.6	40.9	41.4	0.3
	Female	58.9	58.9	59.2	59.2	59.4	59.1	58.6	-0.3
Age	19 and under	57.5	59.0	59.9	60.3	59.5	59.4	59.9	2.4
	20-24	21.6	21.5	21.1	20.8	21.2	20.9	21.2	-0.4
	25 and over	20.9	19.4	19.0	18.9	19.3	19.7	18.9	-2.0

Notes: ^ Percentage is based on share among the listed categories for an indicator.
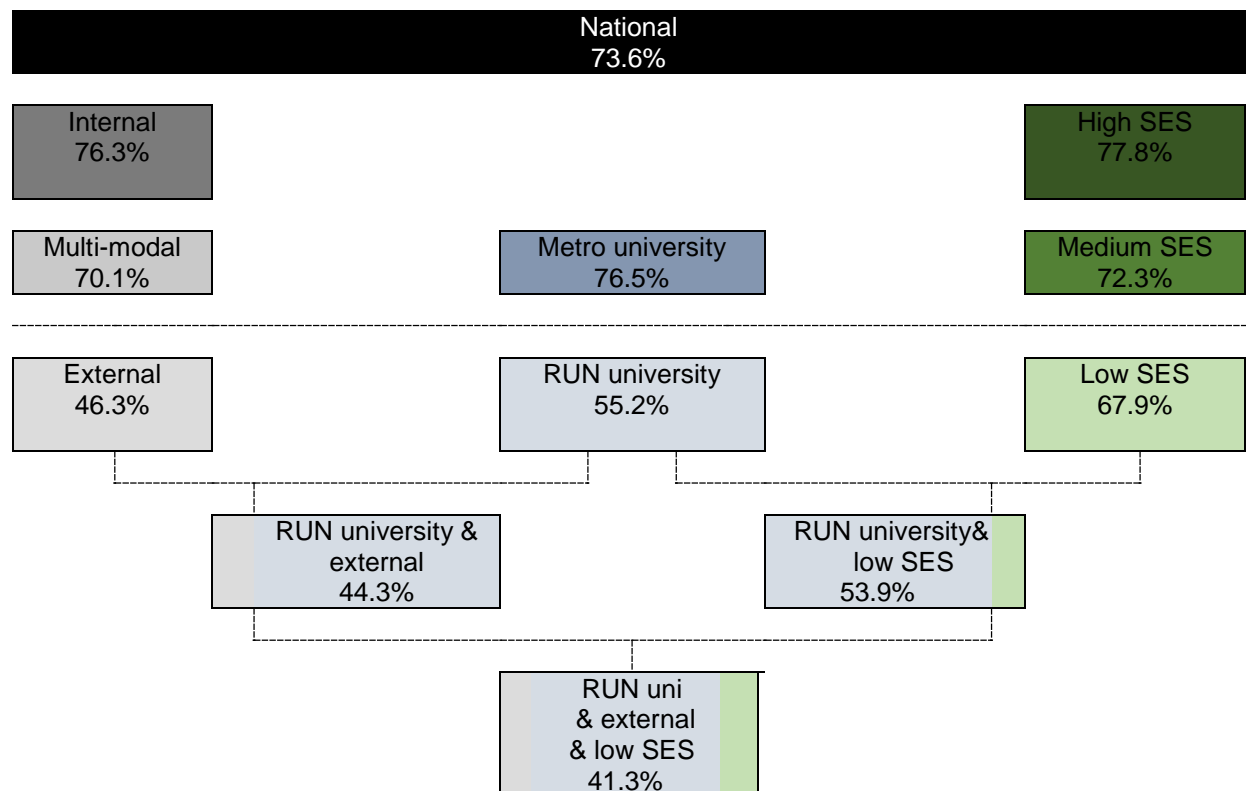Source: DET cohort tracking data, unpublished

Appendix 6

Figure 9: Completion rates, nine years after commencement, by university type, SES and mode of attendance, for domestic bachelor students commencing in 2006