



NCSEHE

National Centre for Student
Equity in Higher Education



Curtin University

INFORMING POLICY AND PRACTICE II

2015 Student Equity in Higher Education
Research Grants Program Projects

Make tomorrow better.

Acknowledgements

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Thanks must also go to our twelve policy and practice commentators for their contributions, as well as to the many people from each institution involved in conducting the research we proudly share here with you in this publication and on the web at ncsehe.edu.au

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Foreword

Professor Sue Trinidad & Professor John Phillimore – NCSEHE Program Leaders

The issues facing disadvantaged students wanting a tertiary education are multi-faceted. Being accepted into a course at university is the first of many hurdles that a student must overcome to complete their degree. University cohorts are also increasingly diverse and require different forms and durations of support: academic, cultural, emotional, financial, and so on.

As higher education confers significant individual benefits by way of personal development, career opportunities, friendships and lifetime learning, it is a driver of social well-being and economic prosperity in Australia. Providing access to higher levels of education to people from all backgrounds enhances social inclusion and reduces social and economic disadvantage.

In the interests of individuals and for the nation, higher education equity for all capable people must be seen as an objective of the system. We know from our research that the policy framework needed to achieve the required change for disadvantaged people will not result from a single policy decision or funding program; educational disadvantage is a complex and challenging problem requiring wide-ranging and evidence-based solutions.

Australian universities have long demonstrated a strong commitment to student equity and to increasing the participation of people from under-represented backgrounds. Commitment to equity was also a core recommendation resulting from the Bradley Review in 2008 and the *Transforming Australia's Higher Education System* report in 2009.

The National Centre for Student Equity in Higher Education (NCSEHE) aims to close the gap between equity research, policy and practice. The NCSEHE supports and informs the evaluation of current equity practice; identifies innovative

approaches to equity, and subsequent gaps in knowledge, through research conducted by universities across Australia; and seeks to translate learnings into practical advice for decision makers and practitioners alike.

In 2014, the NCSEHE introduced an annual, competitive research grants program designed to identify the ways in which Australian higher education access, participation, and success might be improved. The publication, *Informing Policy and Practice: 2014 Student Equity in Higher Education Research Grants Program Projects*, brought together the first 12 of 24 projects the NCSEHE has funded to date through its research program. This publication, *Informing Policy and Practice II: 2015 Student Equity in Higher Education Research Grants Program Projects*, provides a summary of the subsequent 12 projects.

Each project funded through our research grants program addresses different, but related, aspects of higher education student equity. In total, we have committed over \$1.08 million to the 24 studies to date. The resultant reports contribute to an evidence-base from which carefully considered decisions may be discussed and made. Accordingly, further funding of approximately \$350,000 will be committed to the research program in 2016.

The research teams behind the 12 projects presented in this publication have worked diligently to add to the discourse surrounding higher education policy and practice. While the findings confirm that more needs to be done to ensure that capable students are not prevented from accessing and completing higher education, it is unmistakable that many dedicated, bright minds remain focused on building a better future for disadvantaged students in Australia.



Preface

Mr Paul Farnhill – Policy Analyst

Improving access to higher education for people who are marginalised and disadvantaged is established as a bi-partisan economic and social priority to build a better and fairer society in which all people can fully participate.

In practice, overturning entrenched disadvantage is sometimes complex and multi-faceted and has proved a challenge. Students from each of the six accepted equity groups (low socio-economic backgrounds; disability; Indigenous; regional and remote; non-English speaking; and women in non-traditional areas of study) all have their own unique issues and, in some cases, even more significant hurdles if they are representative of more than one equity group.

Sponsoring excellence in research into the complex challenges behind disadvantage is a critical function of the National Centre for Student Equity in Higher Education (NCSEHE). Every year, the NCSEHE sponsors a number of research projects chosen from a competitive tender of research proposals to support students from equity groups. These research projects provide a growing body of evidence that is closing the gap between equity policy, research and practice. The outcome of the accumulation of NCSEHE-sponsored research is that evidence-based research increasingly contributes to the efficiency and effectiveness of equity programs and policies. Research excellence is becoming one of the drivers of positive change towards equity in higher education in Australia.

Informing Policy and Practice II, which summarises the NCSEHE's 2015 Student Equity in Higher Education Research Grants Program, illustrates the exciting research taking place: featuring the creation of new information; incisive analysis; and new and innovative research methods. The projects analyse gaps in our knowledge across a broad spectrum: reaching prospective students with potential and helping them to connect with higher education (facilitating access);

assisting learning experiences and supporting students through higher education (developing experience); and evaluating the effectiveness of equity programs in achieving their goals (measuring outcomes).

In joining the access, experience and outcomes components in the spectrum of learning, the NCSEHE acts as a catalyst in bringing together the stakeholders who 'make equity happen': educational policy makers (who establish the drivers and shapers of innovation in an education system that is increasingly seen as learning for life and accessible to all in a society in which everyone is raising their skills and capabilities); higher education institutions (which are increasingly embedding equity policies and practices into learning and administrative practices); and equity practitioners (who assess and implement best practice equity programs).

This overview of the 2015 research reports presents an enticing invitation to look further to discover more insights into the latest developments in equity research. It focuses on the three critical research areas noted above: facilitating access, developing experience and measuring outcomes.

Facilitating Access

Reaching into the communities of the disadvantaged and encouraging individuals to aspire to higher education and then nurturing that journey is a critical area of support for equity students. It involves connecting people with educational potential, facilitating their educational passions and desire to succeed, and supporting them to achieve their goals along pathways of higher education.

Preface (continued)

Moving Beyond Acts of Faith: Effective Scholarships for Equity Students, a study led by Dr Nadine Zacharias from Deakin University, investigates the relationships between equity scholarships and the retention and success outcomes of recipients at three deliberately different universities: Deakin University, Queensland University of Technology (QUT) and The University of Sydney. As scholarships proliferate, it is becoming more important to understand the characteristics of what constitutes an effective scholarship program. The report examines success outcomes for graduates, relationships between design features and outcomes, and the recruitment effects of the scholarships. The research finds that scholarships are effective, buying recipients time to study. An important recommendation is that the design of schemes should be simpler and broadly applicable to more students to generate effective student support. The research team note that the greatest contribution from the Commonwealth Government would be to provide consistent and predictable levels of financial grant support to students. The thorough report produces many insights and recommendations and has important implications for facilitating access to higher education for equity students.

Capability, Belonging and Equity in Higher Education: Developing Inclusive Approaches, led by Professor Penny Jane Burke from The University of Newcastle Australia, is another inspiring report that goes to the heart of promoting higher aspirations in students by examining the meaning that students give to their 'life stories'. It is widely recognised that individual beliefs on capability are intertwined with identity formation and tied to feelings of belonging. A 2011 study found that only 35 per cent of students believed they were a capable student and expected to do well at university. This 'as we think, so we become' human trait can affect students at any part of the age spectrum and it's vital that we all understand the challenges at this fundamental level. Key lessons for education professionals include fostering confidence and paying closer attention to judgements about capability. The report recommends shifting attention towards educational structures, culture and practices rather than blaming individual teachers and students. The fresh perspectives in Professor Burke's report are invaluable in shaping many support programs, from early access and beyond.

Not There Yet: An Investigation into the Access and Participation of Students from Humanitarian Refugee Background in the Australian Higher Education System,

by Dr Leslie Terry from The University of Melbourne, is another significant work of research into an issue of growing prominence in public policy in Australia and across the world. Australia has taken steps to increase its planned annual intake of refugees by 12,000 people from Syria in 2016-17, taking the annual figure of refugees accepted from 13,750 to 25,750. However, while refugees are from many cultural backgrounds, they are often bundled into one group and then placed into an even broader Non-English Speaking Background (NESB) equity group. The report examines the diversity of refugees, their backgrounds, ages, preferred fields of study and pathways to higher education. It proposes that universities review existing forms of support for refugees, develop more nuanced and culturally specific ways to engage with refugees, better acknowledge the skills and aspirations of refugees, and build better relationships with refugee communities. The report also proposes that the Australian Government work with other organisations to formulate a national framework to guide universities engagement with communities and refugees.

Exploring the Experience of Low SES Students via Enabling Pathways, by Dr Chad Habel from The University of Adelaide, examines the experiences reported by low SES students as they progress through university. The report demonstrates that enabling courses provide a solid foundation for later higher education, and this is confirmed in student observations about their increased self-belief and feelings of transformation. However, the report also notes other challenges from low SES students that were not so easily overcome, including tensions in personal relationships as students managed the sometimes conflicting demands of university and personal life.

Developing Experience

Once students reach higher education, it's imperative that the experience is rich and rewarding, that stresses are manageable, and that outcomes are positive. High retention rates are an indicator of success for students and institutions as well as an affirmation of equity policy aspirations.

Many equity group students need and deserve support. The 2015 research reports have an emphasis on two of those groups: Indigenous students and students with disability.

Culturally Inclusive Learning for Indigenous Students in a Learning Management System, led by Dr Neal Dreamson from QUT, breaks new ground in identifying the cultural needs

of Indigenous students in an online learning environment through Learning Management Systems (LMS). While universities acknowledge the need for cultural diversity, the research project investigates the needs of Indigenous students and develops a new conceptual framework with four dimensions: communication, collaboration, community and interculturality. Assisted by a thorough quantitative and qualitative analysis, the research produces an innovative delivery of conclusions and recommendations by citing 10 commonly believed myths about LMS and responds to them with positive proposals for change.

Best Practice in Supporting Indigenous Students with Disability in Higher Education, a study led by Associate Professor Michele Fleming from the University of Canberra, makes a significant contribution to a 'double disadvantage' equity group: Indigenous students with disability. The report examines a little-researched area to investigate what constitutes best practice in supporting a small but growing group of students. In the course of identifying the challenges, the research points the way to solutions focused on the relationship between Disability Units and Indigenous Education Units. Proposed are new initiatives and responsibilities for Disability Units within a whole-of-university approach involving more cultural awareness training.

The Role of Inherent Requirements Statements in Australian Universities, led by Dr Andrew Harvey from La Trobe University, investigates a fundamental building block of support for students with disability: Inherent Requirement Statements (IRS) that act as guidelines to clarifying the capabilities that are needed to successfully engage in studies. The report audits Australia's 37 public universities and Bond University (a private institution), examining institutional variability, differences in terminology, possible legal implications and how students with multiple barriers to participation face special challenges. Dr Harvey's report notes that universities find themselves in a difficult position balancing multiple and sometimes competing objectives. Given the significant guiding role of IRS, the report's recommendations are important in facilitating best practice outcomes. Two key recommendations include greater consistency, clarity and transparency in IRS, and that staff monitor the impact of IRS on prospective, enrolled and graduating students.

Access and Barriers to Online Education for People with Disabilities, led by Dr Mike Kent from Curtin University,

continues the disability theme by inquiring into a relatively unexplored area: how students with disability perform in online education. Having access to online education conveys huge advantages, but it can come at the expense of students being invisible to their institutions. The comprehensive report examines how Open Universities Australia (OUA), which comprises 15 higher education institutions teaching courses fully online, performed with respect to the 6.4 per cent of its students who have disability. The research investigates several aspects of learning: access; technology; disclosure of information; accommodation; and teaching methods. Its practical findings are discussed in eight categories of impairment, each of which constitutes a 'sub report': mental illness; medical impairment; mobility impairment; hearing impairment; learning disability; vision impairment; acquired brain impairment; and intellectual disability. Across all eight categories, the report looks at the value of communicating with students, as well as flexibility in the adoption of technology and teaching methods. It also proposes avenues for re-conceptualising universal design in online learning.

Exploring the Retention and Success of Students with Disability, led by Professor Sue Kilpatrick from the University of Tasmania, examines how universities compare in retention and success rates of students with various disability types, questioning which supports and policies are most effective. As the percentage of students with disability in higher education increased from 4.4 to 5.8 per cent of the total student population between 2007-2014, effective support is becoming a more important issue.

The study examined Disability Action Plans, Learning Access Plans, recruitment mechanisms, socially inclusive policies, and collaborative initiatives with external stakeholders. One big and important recommendation, which synthesises the report's findings, was the development of a summary of proposed adjustments to guiding principles of good practice for supporting students with disability.

Supporting Students with Autism Spectrum Disorder in Higher Education, led by Dr Ceridwen Owen from the University of Tasmania, investigates improving support for students with Autism Spectrum Disorder, which includes Asperger Syndrome, a consequence of which is hyper-sensitivity to environmental stimuli. The report fills gaps in our knowledge and produces findings in three areas: holistic disability support measures; teaching methods and innovations; and inclusive design solutions. The research team also considered how the new

Preface (continued)

National Disability Insurance Scheme could assist students with disability.

Measuring Outcomes

The test of support measures for equity groups in higher education – across all groups and intervention points – is the success of students themselves. Traditional measures of success include retention and completion rates, however to truly understand the effect of higher education on equity students, it is increasingly recommended that we look beyond these measures and examine how graduates are faring in employment; the suitability or relevance of their employment against the degree attained; and post-graduation earnings. The more we collectively know about outcomes, the better positioned we will be to focus on areas that need further improvement. Two of the 2015 NCSEHE-funded research projects focused on employment outcomes by equity groups using different indicators of success. Taken together, they complement our knowledge as to how equity students fare after university.

Labour Market Outcomes of Australian University Graduates from Equity Groups, led by Assistant Professor Ian Li from The University of Western Australia, tested the outcomes of equity graduates through four measures: the probability of employment; qualification-job match; job quality; and earnings. Profiles for students from four equity groups were developed: low SES; regional and remote; NESB; and women graduates from STEM fields of study. Key findings across all groups include: graduates who worked in their final year of study were 28 per cent more likely to find a job; graduates from low SES backgrounds had comparable outcomes to graduates from more privileged backgrounds; and students from regional and remote areas fare as well as metropolitan students in finding jobs and even better in pay. However, NESB students lag behind English speaking background students, earning on average 12 per cent less. Female graduates in STEM subjects remain a concern due to early age cultural preferences and a tendency to study generalist science degrees when more specialised education is often required.

Investigating the Relationship Between Equity and Graduate Outcomes in Australia, led by Dr Sarah Richardson from ACER, took an equally broad analysis of equity groups, including graduates' preferred fields of study, employment outcomes after graduation, and salary levels achieved. The recommendations of the research are indicative of current issues and possible future trends. Dr Richardson et al. propose

new measures of post-graduation employment; broadening definitions of graduate success to include entrepreneurship and start-ups; extending the follow up times on post-graduate employment success; and better identification of barriers among graduates from disadvantaged backgrounds, particularly students with disability.

In Perspective

An equitable higher education system in which the composition of the student body reflects the composition of society as a whole confers many economic and social benefits to a country. The challenge of securing appropriate representation of equity groups is, however, an ongoing public policy challenge hampered by widening growth in inequality, major structural shifts in the Australian and international economies, and rapid technological change that is radically altering industries, employment and lifestyles. As the whirlwind of continual change comes into play with the complex backgrounds of disadvantaged students, it is no longer safe to assume that old established programs of equity group support will work as efficiently as they once did.

As the research herein illustrates, education policy makers, institutional leaders and equity practitioners need to be continually aware of developments at three critical assessment points: facilitating access; developing experience; and measuring outcomes.

Excellence in research is needed to better understand how the issues and challenges of supporting equity students are evolving. It is only through this knowledge that we can propose innovations in programs of support for equity students who then demonstrate effective outcomes for themselves and society as a whole. In continuing to expand our evolving knowledge of what constitutes best practice, this second publication of NCSEHE-sponsored research, *Informing Policy and Practice II*, contributes to innovative thinking and leadership in education and helps to shape a better future for not just equity students, but all Australians.



Exploring the Retention and Success of Students with Disability

Professor Sue Kilpatrick, Dr Susan Johns, Dr Robin Barnes, Ms Darlene McLennan, Ms Sarah Fischer & Ms Kerri Magnussen

The number of students with disability in higher education is increasing. National data reveal differences in the retention and success of these students across Australian higher education institutions but the reasons for this are not clear. The overarching aim of this study was to explore the relationship between supports and university adjustment for students with disability, and their retention and success.

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This exploratory study used a mixed methods approach. Institutional-level data from 2007 to 2013 from the Higher Education Student Data Collection were analysed by total disability students, by disability types and by the student disclosed need for services. Disability types were hearing, learning, mobility, visual, medical and other. Data were analysed using SPSS version 23, in terms of commencing and enrolled students, retention and success. Table A and one Table B providers were then categorised according to overall performance of students with disability, into high, medium, inconsistent and low. Three institutions from each category were invited to participate in semi-structured interview to identify similarities and differences in terms of their policy and practice approaches to the provision of adjustments for students with disability. Data were also collected from a desktop audit of all Table A and B providers via their disability service website, to provide an overview of policy, practice and institutional culture in relation to disability across the institutions.

Findings from National Data

Institutional-level data from 2007 to 2013 from the Higher Education Student Data Collection revealed that:

1. The percentage of both commencing students and total enrolled students with a disability at Australian universities increased from 2007 to 2013.
2. There are no real changes in the distribution of disability types across the years.
3. Smaller universities with 10,000-30,000 students have a larger proportion of commencing and enrolled students with disability, compared to large universities with more than 30,000 students.



Dr Ann Stewart
Former Head, Student Access, Equity and Diversity
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Kilpatrick et al. have undertaken a comprehensive study engaging a multi-methodology approach exploring the impact of disability upon students' retention and success. Informed by a wide-ranging literature review and drawing on the national student equity data-base with additional input from a small cohort of practitioners, the report sets out recommendations primarily relevant to institutional policy and practice, although it also contains implications for national policy in regard to data collection.

The findings highlight the challenge for the federal government not only in improving national consistency in categorisation of students with disability, but also suggest some urgency in refining those data categories to enable differentiation between disability types, particularly autism and mental illness. As the authors point out, fundamental to this is

ensuring that students feel safe in disclosing their disability.

Kilpatrick et al. suggest that utilising the concept of universal design, institutional student engagement strategies should be considered holistically, within the context of the student life cycle; from outreach and enrolment and beyond to employment or vocation. They indicate that this is best achieved through a whole-of-institution approach that would also address gaps in the knowledge of academic and support staff.

This research makes an important and valuable contribution to the field of disability in student equity, highlighting the work still to be done in better understanding the impact of specific disabilities on retention and success, and in providing well-targeted and resourced services to ensure equitable outcomes.

4. Students who identified as having a hearing disability were consistently the smallest group of commencing student while students who identified as having a medical disability were consistently the largest group of commencing students across the seven years.
 5. Students with disability have a slightly lower success rate than the total student population.
 6. Students who identify as having learning, other, or medical disability and as requiring services consistently performed less well than total disability students across the years.
 7. Students with disability are retained at a consistently lower rate than the total student population.
 8. Students who identify as having learning disability were consistently retained at a higher rate than total disability students.
 9. Students who identify as having other disability and requiring services were consistently retained at a lower rate than total disability students.
 10. There were no consistent significant differences in student enrolment, retention or success between university groupings.
 11. Success rates of students with a disability according to university size have converged over time.
1. Most institutions described socially inclusive policies and practices and supportive leadership.
 2. A number of institutions did not have a current disability action plan (DAP).
 3. Few institutions involved students with disability in policy development.
 4. Service units for students with disability were usually located within a broader student equity/support/wellbeing structure and disability support was generally a responsibility shared throughout institutions, and not just the responsibility of the disability support team, indicating the move from a medical model to an inclusion model.
 5. Recruitment mechanisms that involve external linkages with schools, disability networks or others can assist in the transition of students with disability.
 6. Collaborative approaches involving internal and external stakeholders can assist improve retention and success of students with disability.
 7. The widespread implementation of learning access plans (LAPs) suggests an increasing importance being placed on formalised procedures for identifying and meeting student needs
 8. The provision of more services and better support for students with a mental health disability and those with autism is an area requiring further university investment.
 9. Inconsistent categorisation of students with mental health disability in national and institution data collection makes targeting services and tracking institutional performance challenging. A socially inclusive framework that includes the concept of universal design is a mitigating strategy.
 10. More training for academic and non-academic staff to better support students with disability is required, including participation in national training in relation to mental health.

Findings from Website Audit and Interviews

Past performance as reflected in the quantitative, national data cannot necessarily be explained by current practice, as explored in the qualitative data. There were fewer differences between institutions in terms of policies and practices for students with disability, than the quantitative data would suggest. Differences across institutions were largely in relation to the maturity or stage of development of their inclusive policies and practices.

Investigating the Relationship Between Equity and Graduate Outcomes in Australia

Dr Sarah Richardson, Professor Dawn Bennett & Associate Professor Lynne Roberts

Australian higher education equity policy focuses mostly on access and participation with the implicit assumption that disadvantage will be ameliorated through educational achievement. Less is known as to whether patterns of disadvantage continue post-completion. In a context in which graduate employability is becoming an important yardstick against which to measure institutional effectiveness, this questions is of fundamental importance to higher education equity practitioners and policymakers.

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This study employed Commonwealth graduate outcome data to investigate relationships between disadvantage and graduate outcomes in Australia, with disadvantage defined as a graduate belonging to one or more of the following groups: low SES; Indigenous; regional; with disability; from a non-English speaking background (NESB); born outside Australia; and female in a technical area. The study provided critical insights into how access to higher education does – or does not – lead to improvements in post-graduation equity.

The study utilised data from the 2014 Australian Graduate Survey (Department of Education and Training, 2014) which reported information on graduate outcomes from a total of 142,647 graduates who completed their studies in 2013 and 2014. The data was collected between four and six months after graduation at which time many graduates were simultaneously undertaking multiple activities such as working, studying and searching for work time. Mindful of this complexity, the team employed five discrete categories for the data analysis, as illustrated at Figure 1. It is important to note that none of these categories excluded seeking work.

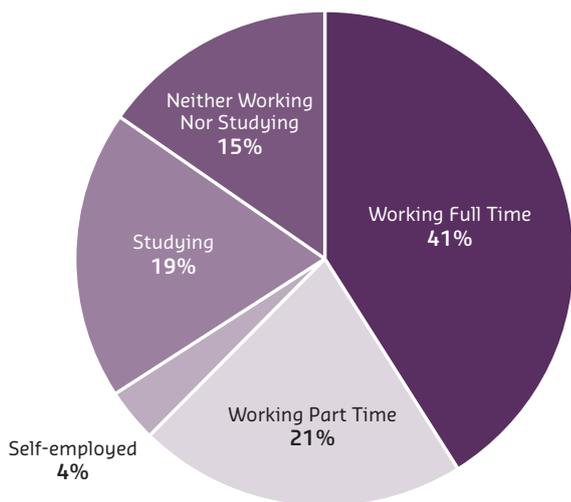


Figure 1: Discrete categories of graduate activities (n=140,912)

Data analysis focused on the graduate outcomes of those from disadvantaged backgrounds. For the purposes of this study ‘disadvantage’ was theorised as constituting several independent, but potentially overlapping, characteristics, with varying numbers of graduates in each cohort:

- Indigenous Australians (Aboriginal and Torres Strait Islander people) – 1,106
- Graduates with disability – 4,229
- NESB (speaking a language other than English as their first language) – 39,408
- Born outside Australia – 55,166
- Regional (living outside the capital city of any state or territory) – 25,240
- Low SES (from bottom socio-economic (SES) quartile) – 11,151
- Female graduates from engineering, science and information technology fields – 8,603.

Disadvantage by field of education

Graduates from disadvantaged backgrounds were clustered in particular fields of education:

- Graduates from regional areas and from low SES backgrounds were particularly concentrated in the fields of medicine and related studies and education.

- Indigenous and graduates with a disability were particularly concentrated in the field of society and culture.
- Graduates born outside Australia or who spoke a language other than English at home were particularly concentrated in the fields of management and commerce and engineering and related technologies.

Beyond the breadth of the field of education categories, further nuances were seen, particularly in the broad areas of medicine and related studies and society and culture:

- Graduates from many disadvantaged groups were clustered within the sub-fields of broad disciplines that are arguably regarded as lower status (and which are less well paid), such as nursing and teaching.
- In the broad field of medicine and related studies graduates from disadvantaged backgrounds were clustered in the fields of nursing and midwifery and public health.
- In the broad field of society and culture, graduates from disadvantaged backgrounds were clustered in the fields of human welfare studies.

Employment patterns

Analysis of the outcomes of all graduates revealed several employment-related themes, many of which persisted as patterns among graduates from disadvantaged backgrounds. The strongest pattern was that graduates who undertook paid work in the final year of study were much more likely to be employed than those who did not. The key predictors of employment are summarised at Figure 2.

In addition to overall patterns of employment, nuanced patterns among graduates from disadvantaged backgrounds were demonstrated by showing how multiple categories of disadvantage had a negative impact on graduate employment. The most significant of these was disability which was identified as a key factor in the post-graduation employment prospects of students.

- Having a disability decreased the likelihood that graduates were working if they were Indigenous, from a regional area, NESB, low SES, born outside Australia or were women in a technical area.

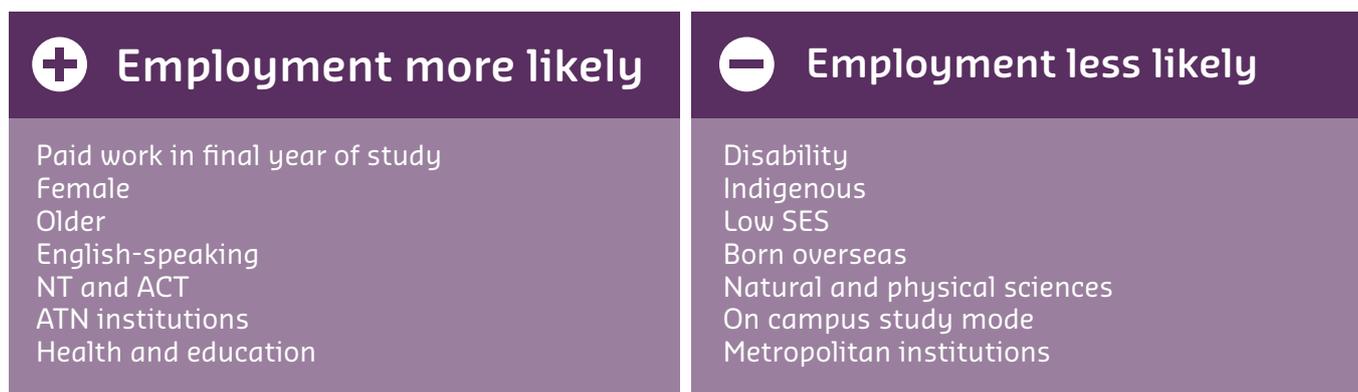


Figure 2: Summary of factors related to employment status of graduates (n=140,912)

- Coming from a low SES background decreased the likelihood that graduates were working if they were Indigenous, had a disability, spoke a language other than English at home, were born outside Australia or were women in a technical area.
- Speaking a language other than English at home decreased the likelihood that graduates were working if they had a disability, were from a regional areas, were born outside Australia, were low SES or were women in technical areas.
- Being born outside Australia decreased the likelihood that graduates were working if they had a disability, were from a regional area, spoke a language other than English, were low SES or were women in technical areas.



Dr Hannah Forsyth
Lecturer in History
Australian Catholic University

Investigating the Relationship between Equity and Graduate Outcomes in Australia is a significant report, exposing

as myth the ideal that all people, regardless of background, have equal opportunity to access education, employment and income levels commensurate with their talents. At the same time, the report points towards ways that this ideal might become reality, if institutions and their staff are prepared to confront the inequalities it exposes.

This report provides important research towards answering crucial questions about the effectiveness of higher education for the employment and earning prospects of equity groups. Does higher education enable social mobility? Will expanding higher education make a fairer society by also expanding access to high-status, high-earning jobs for students from disadvantaged backgrounds? Sarah Richardson, Dawn Bennett and Lynne Roberts have gone beyond analyses of recruitment and retention of equity students to higher education to explore what happens to them next.

Since 1989, universities have expanded, leading to greater enrolments in equity categories. For some institutions, growth and financial success has been achieved on the back of this expansion. The authors take institutions and

governments to task by considering the relative career benefits of higher education for students from these equity categories. Through their quantitative and qualitative research, the authors demonstrate that higher education does not benefit all equally and that employment and earning remains correlated with predictable class, race, able-bodied and gender characteristics.

The authors show that if higher education is to fulfil its promise to the students we enrol, institutions need to do more to recruit students from equity categories to high status disciplines and provide real-world work (and perhaps as importantly, professional networking) opportunity. Their findings demonstrate that this is not just a responsibility of governments and institutional administrators: university lecturers are important too. University academics are a key source of career information for students whose family and social networks do not provide career-relevant networks and knowledge – for some, it seems we are their only source of information. Those of us who teach in universities need to learn how to advise our students on career paths and employment opportunities. It is a task that seems alien to many of us, but if we purport to care about equality in society and students from disadvantaged backgrounds look to us to help make this happen, we will need to adapt and develop new skills ourselves.

FULL REPORT:

<https://www.ncsehe.edu.au/publications/investigating-the-relationship-between-equity-and-graduate-outcomes-in-australia/>



Labour Market Outcomes of Australian University Graduates from Equity Groups

Assistant Professor Ian Li, Dr Stéphane Mahuteau, Associate Professor Alfred Michael Dockery, Professor P.N. (Raja) Junankar & Professor Kostas Mauromaras

The Australian higher education sector has had a number of changes in the recent past. Notably, the Bradley (2008) *Review of Australian Higher Education* had recommended an increase in higher education access and completion by individuals from equity groups or backgrounds. Since the Bradley Review, there have been increases in the higher education participation of individuals from equity groups.

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Recently, a report by Koshy (2014) reported that the share of students from equity groups in higher education has been increasing. That report looked at trends in higher education student enrolment over 2007-2012, for individuals from six key equity groups. These are students who: (i) are from low socioeconomic status backgrounds (SES); (ii) have disability; (iii) are Indigenous; (iv) are from regional locations; (v) are from remote locations; and (vi) have non-English speaking backgrounds (NESB). Koshy (2014) reported that the growth in higher education enrolments of individuals from these equity groups during the period, expressed as a proportion of all higher education enrolments, have all been positive. For instance, the share of low SES students had increased from 16.3 percent in 2007 to 17.3 percent in 2012.

Another development in the higher education sector lies in the uncapping of Commonwealth-funded university student places under the student demand-driven system of 2012. Under the demand-driven system, higher education student enrolments have been increasing, which has led to doubts about maintaining academic standards and calls for university students places to be capped, or for a minimum Australian Tertiary Admission Rank (ATAR) for university admission to be imposed. Yet, as Norton (2013) points out, imposing minimum ATARs would impact negatively on low SES students most. At the same time, a study by Li and Dockery (2015) indicated that low SES first-year university students perform relatively better in comparison to their peers from more privileged backgrounds, while a study by Pitman, Koshy and Phillimore (2015) showed that Australia's higher education expansion has not led to any decline in educational quality and standards. The findings from



Mr Andrew Norton
Higher Education Program Director
Grattan Institute

Accumulating studies suggest that socio-economic status has most of its direct influence on higher education by the time students finish school. While low-SES students are less likely to finish school or get a high ATAR, for a given ATAR they have similar university participation rates to high-SES students and get slightly better marks, although with slightly lower completion rates. Few studies look at post-university outcomes, but Assistant Professor Ian Li and colleagues suggest good news here as well: low SES does not have a direct negative effect on early employment outcomes.

They offer an intriguing hypothesis as to why these results are better than expected. The relatively small

proportion of the low SES cohort who make it to university graduation day are likely to have unusually positive personal attributes, which also benefit them in the labour market. While this paper confirms that marks matter in employment, an increasing body of literature points to the importance of non-academic attributes in the job market.

The paper finds substantial labour market disadvantage for female STEM graduates. Although discrimination can hardly be ruled out as a factor in the heavily male IT and engineering professions, only small numbers of women take the relevant courses. Female STEM students are overwhelmingly in generalist science degrees, for which employment outcomes have never been great and are now terrible. The easiest way to avoid this problem is to study something else.

these two studies thus favour higher education policies that maintain access for underprivileged individuals. Another study by Lim (2015) examined the probability of completing university degree courses for various equity groups using data from the Longitudinal Study of Australian Youth (LSAY). Some key findings from Lim's (2015) study are that students with low SES are less likely to complete their course compared to students with high SES, as are students from regional locations. Students from an Asian language background are more likely to complete their university course, compared to those from 'other' language backgrounds.

Previous studies on outcomes of Australian university students from equity groups have been limited in terms of the scope of the outcomes analysed, concentrating mainly on university academic outcomes. For example, Win and Miller (2005), Birch and Miller (2007), Mills et al. (2009) and Li and Dockery (2015) assessed first-year students' university academic outcomes from one single university each in their studies, while Lim (2015) examines university course completion rates. There are relatively few studies looking at the labour market outcomes of university graduates from equity groups. Further information on labour market outcomes for students from equity groups would be beneficial in informing higher education policy. In particular, it would inform policies to help disadvantaged groups at particular stages of their academic life.

The current study widens the evidence base in that it assesses a range of employment outcomes of disadvantaged students, and further, utilises data from multiple universities from one Australian state. Outcomes assessed include the probability of employment, qualification-job match, job quality, and earnings. Hence, the assessment of the graduates' labour market performance contributes by examining key outcomes which are primary motivating factors behind higher education access and equity policies. In addition, individuals in the key equity groups tend to belong to groups who face labour market disadvantage.

While graduates from low SES and regional/remote backgrounds fared favourably, graduates from non-English speaking backgrounds lagged behind other graduates in finding a job and job earnings (particularly for female graduates from non-English speaking backgrounds compared to other female graduates), although there was no difference in terms of job match or job quality. Female graduates were found to be under-represented in STEM fields of study. While female STEM graduates were as likely as their male counterparts to get a job, they were much less likely to have good jobs and earned substantially less.

FULL REPORT:

<https://www.ncsehe.edu.au/publications/labour-market-outcomes-of-australian-university-graduates-from-equity-groups/>



Culturally Inclusive Learning for Indigenous Students in a Learning Management System

Dr Neal Dreamson, Associate Professor Gary Thomas, Professor Anita Lee Hong & Ms Soyoung Kim

A Learning Management System (LMS) such Blackboard, Moodle and Web City has been utilised for enhancing the quality of learning and teaching in Australian universities. Yet there are no specific university policies and guidelines addressing the digital divide in the use of an LMS. In particular, Indigenous cultural values are rarely considered in LMS based learning design. As a result, the equity gap in terms of the quality of learning opportunities for Indigenous students remains unidentified. In this context, the project was aimed at identifying cultural needs of Indigenous students in the online learning environment and articulating culturally inclusive learning for Indigenous students in an LMS. Based on the literature review in the fields of culturally inclusive learning, online and blended learning, and Aboriginal pedagogies, we created a conceptual framework for culturally inclusive learning with four dimensions: communication, collaboration, community, and interculturality that was used in the following three stages: policy and guideline review, quantitative data analysis, and qualitative data analysis.

First, we reviewed the policies and guidelines of Australian universities on cultural diversity (n=30) and LMS learning and teaching (n=10). The review results indicated that the policies and guidelines are aimed at promoting cultural diversity, inclusive teaching, and student equity, but those on an LMS appear to be less important for promoting cultural inclusivity and focus more on facilitation and enhancement of individual students' self-engagement and self-assessment and self-motivated learning. In the LMS policies, we identified that 'communication', 'collaboration' and 'community' are indistinctive, and 'collaboration' and 'community' are vaguely (or too broadly) recognised, and 'cultural diversity and identity' do not appear. Significantly, we failed to find any principles and strategies on an LMS for Indigenous students.

In the stage of quantitative data collection and analysis, second, we randomly selected QUT Blackboard units (n=50) across study areas and evaluated them against how the available functions, features, and tools of the Blackboard units are utilised for each dimension of the framework. The evaluation results indicated that the sites are not exclusive of communication and collaboration, but there is a lack of evidence that they promote holistic, collaborative and community driven learning. For example, only eight out of 50 sites used Discussion Boards, two used Wikis, and none of them used Groups, Blogs, and Journals. The results also indicated that there is a lack of evidence whether any other pedagogies for communication, collaboration, and community other than information dissemination are applied.

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In the stage of qualitative data collection and analysis, third, we investigated Indigenous students' and teachers' perceptions and experiences of communication and collaboration in Blackboard units. In doing so, we undertook an online questionnaire with Indigenous students (n=100) and an interview with Indigenous students and staff (n=28, 9 students, 11 academic staff, and 8 professional staff). The analysis results indicated that there is a clear gap between Indigenous students' cultural needs and the current utilisation of Blackboard. The majority of the students appeared to believe that they have not been given an opportunity to use interactive communication tools for human-to-human interaction and they have mostly been encouraged to download given resources and materials. In the interviews with academic staff, we identified that the dominant understanding of Blackboard is a tool for information dissemination and delivery. The interview data also revealed that academic staff tend to understand that: (a) their role in Blackboard is an information transmitter; (b) Blackboard is not the best place for culturally inclusive learning; (c) authentic and interactive learning occurs mostly in the classroom; and (d) a top-down approach and one-to-many communication are the most efficient way of using Blackboard.

In the conclusion of this report, we highlight the ten myths in using an LMS and propose an exemplary LMS design framework for culturally inclusive learning. The students' feedback and the learning designers' advice can be summarised as follows: Teachers' active participation in an LMS is a pedagogical innovation that repositions students as active participants in and co-creators of interactive learning experience. The true benefit of using an LMS in higher education is: Culturally inclusive learning can be achieved by using multiple communication channels that support flexible learning, collaborative learning, and community based learning.



Dr Maria Raciti
Associate Professor in Marketing
University of the Sunshine Coast

Dreamson, Thomas, Lee Hong and Kim are to be praised for their work as it not only sheds light on the sub-optimal use of Learning Management Systems (LMS) but reimagines LMS as 'a third cultural place' and repurposes LMS as digital environments for culturally inclusive learning by Indigenous students. Indeed, LMS are a critical, yet often overlooked, touchpoint for Indigenous students' and this report may inform and shape institutional policy and practice.

The report is a thorough and robust exposé of the current LMS policies and guidelines of the sector and it squarely reveals what might be best described as legacy LMS perceptions and practices which centre on the view that LMS serve as a non-interactive asynchronous digital repository used by staff to upload information and by students to download information.

Dreamson and colleagues' project report is germane and timely, providing useful and meaningful outcomes for Australian universities. The thoroughness and rigour of their work is such that their proposed 'exemplary LMS design framework for culturally inclusive learning' is a secure platform for universities to base redevelopment of their associated LMS policies and practices and, importantly, to calibrate their LMS policies and practices with cultural inclusivity policies and practices.

FULL REPORT:

<https://www.ncsehe.edu.au/publications/culturally-inclusive-learning-for-indigenous-students-in-a-learning-management-system/>

Best Practice in Supporting Indigenous Students with Disability in Higher Education

Associate Professor Michele Fleming & Dr Diana Grace

This report is the result of a grant awarded by the National Centre for Student Equity in Higher Education to the authors. The purpose of the report is to provide an understanding of the numbers of Aboriginal and Torres Strait Islander students with disability in Australian higher education and the support they currently receive. Further, the report provides a series of recommendations for good-practice in supporting this group of students based on a review of the literature and an understanding of current support practices in the higher education sector.

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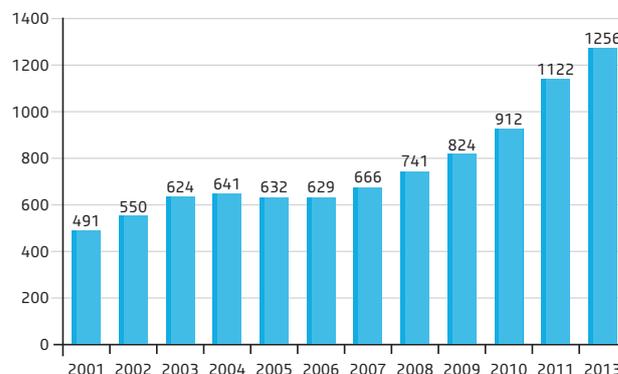
The report comprises four distinct sections. The first section of the report examines the extant literature pertaining to disability services in higher education, disability support for Aboriginal and Torres Strait Islander people, and the supports available for Indigenous students in higher education. The literature review is extensive, though not exhaustive, and seeks to discern the key factors that affect the experiences of Aboriginal and Torres Strait Islander students with disability.

Secondly, data were obtained from the Australian Government Department of Education and Training regarding the numbers of Aboriginal and Torres Strait Islander students with disability at each Australian university from 2001 to 2013. The data were examined according to students' enrolment status (i.e., full-time vs. part-time); level of degree being undertaken (i.e., undergraduate, postgraduate-coursework or higher degrees by research); and the field of study being pursued.

The third section reports on a study in which current disability advisers throughout the higher education sector were asked about the general and specific supports provided to Aboriginal and/or Torres Strait Islander students with disability at their university. Participating universities demonstrated high consistency regarding generic disability support provided, but some variation in the delivery of these services to Indigenous students. This work also highlighted the variation in training provided to disability advisers with regard to cultural awareness and cultural competence.

The final section of the report combines all these findings and makes recommendations for working with Aboriginal and Torres Strait Islander students with disability at Australian universities.

We would like to acknowledge that this research took place on the land of the Ngunnawal people. Neither author is Aboriginal or Torres Strait Islander and we are aware that Aboriginal and Torres Strait Islander peoples have been over researched and under consulted (Bostock, 2007; Clark, 2008; Dodson, 1995). It was not the goal of the current research to contribute further to this. Thus, our report focuses on integrating existing information in order to inform practice. This work has been informed by Aboriginal people and we honour their contributions. We would particularly like to thank the Aboriginal and Torres Strait Islander staff members and students at the University of Canberra who provided us with advice in relation to this report. As a result of the recommendations made in this report, we hope that Aboriginal and Torres Strait Islander people will become key decision makers in how to best support Indigenous students with disability at Australian universities.



Enrolments: Aboriginal and Torres Strait Islander Students with disability across all Australian universities from 2001 to 2013



Ms Cheryl Godwell
 Manager, Indigenous Student Services
 Charles Darwin University

Associate Professor Fleming and Dr Grace’s report provides a thorough analysis of the diverse and complex issues affecting Indigenous students with disability undertaking studies within contemporary higher education institutions.

At a time where rates of Indigenous students - and even more so, Indigenous students with disability - continues to grow, there is a heightening level of need for universities to develop and implement whole-of-university approaches that provide ‘informed and holistic’ services and support to all students, but particularly to Indigenous students with disabilities.

Whilst the results are based on a relatively small number of responses, the findings and recommendations within

this report cannot be ignored. Universities must commit to enabling Disability Units (DUs), Indigenous Education Units (IEUs) and faculties with the necessary skills and expertise to offer culturally safe and appropriate services.

As poignantly stated by Fleming and Grace, a ‘whole-of-university approach cannot simply be left to universities’ IEUs’ and can only be achieved through highly effective and collaborative partnerships between DUs, IEUs and faculties.

This report challenges universities to re-think current approaches to providing essential services and support to Indigenous students with a disability and more importantly, offers Indigenous students with a disability the opportunity to assert their rights and expectations of their chosen institutions.

FULL REPORT:

<https://www.ncsehe.edu.au/publications/best-practice-in-supporting-indigenous-students-with-disability-in-higher-education/>

The Role of Inherent Requirement Statements in Australian Universities

Mr Matt Brett, Dr Andrew Harvey, Dr Andrew Funston, Ms Rachael Spicer & Mr Adam Wood

Australian university disability practitioners have long advocated statements that describe the inherent requirements of academic programs. Students are protected by the Disability Discrimination Act 1992 (Cth), which makes it unlawful to discriminate on the grounds of disability across a range of criteria that include denying access to any benefit provided by the educational authority, and developing curricula that will exclude a person from participation.

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Similarly, the Disability Standards for Education 2005 (Cth) require universities to make their programs accessible to students with disabilities and make reasonable adjustments to enable student participation. Reasonable adjustments routinely made include provision of additional time to complete assessment tasks and provision of academic information in ways that are accessible to relevant students (such as Braille readings or Auslan interpretation).

However, while reasonable adjustments are required, these accommodations cannot themselves compromise the essential elements of a course that all students must meet. The essential elements of courses are not self-evident. Universities publish descriptions of courses and subjects in publications that include handbooks, course and subject materials, graduate attribute statements and promotional materials. Indeed the Higher Education Standards Framework (Threshold Standards) 2015 (Cth) requires universities to specify course learning outcomes and provide students with plain language statements of relevant information including course design and prerequisite knowledge. Some universities have made a judgement that routine course and subject descriptions are not sufficient as a reference point for informing consultations about identifying reasonable adjustments. These universities publish inherent requirement statements that are designed to aid the process of identifying reasonable adjustments. To illustrate, in nursing programs at Western Sydney University, these statements include a requirement for strength and mobility using both fine and gross motor skills to be able to undertake tasks such as patient transfer and aseptic wound dressing.



Trevor Allan
Life Member
Australian Tertiary Education Network on Disability (ATEND)

The articulation of inherent academic requirements has been a major issue in Higher Education for some time.

A critical factor in the determination of reasonable adjustments for students with disabilities, many disability practitioners have lamented the lack of clear, comprehensive inherent requirement statements to inform the process of determining appropriate adjustments while preserving academic integrity. Recently there has been a significant increase in the development and implementation of inherent requirements across a number of Australian universities.

This research is a timely and valuable contribution to the current work and discussions on inherent requirements. By placing inherent requirements in the legal, historical, academic and professional contexts, the research team has

provided a sound base for examining the current situation regarding the development, distribution and use of inherent requirements in Higher Education in Australia.

This research articulates and discusses some issues associated with inherent requirements in Higher Education. The recommendations, if adopted, would provide a clearer, more consistent approach across the sector, facilitating better informed access and inclusion for all students and significantly enhance the preservation of academic integrity.

It is important to note that, while disability legislation may be the catalyst for developing inherent requirements and will have the most relevance in practice, inherent requirements must apply to all students and not only students with a disability.

Inherent requirement statements are described in some cases as a mechanism for streamlining the process of determining reasonable adjustments and minimising the possibility that students unknowingly commence a course for which they do not have the characteristics required to complete satisfactorily, or where professional registration would be unlikely or impossible. The provision of inherent requirement statements is growing across the sector.

Specific examples of inherent requirement statements, that are representative of those commonly used across the sector include:

- Ability to understand and respond to verbal communication accurately, appropriately and in a timely manner
- Ability to work constructively in a diverse and changing academic and clinical environment
- Knowledge, understanding, and compliance with legislative and regulatory requirements, as pre-requisites to clinical placements in order to reduce the risk of harm to self and others
- Ability to complete tasks that involve fine motor skills including being able to grasp, press, push, turn, squeeze and manipulate various objects.

Despite the rapid recent growth in university participation of students with a disability, there has been little research conducted on the prevalence, consistency and characteristics of inherent requirement statements across Australian institutions and fields of education. We know little about the relationship between inherent requirement statements and other publications used by universities to describe their academic requirements at an institutional, course, or subject level. There also remains a dearth of research on the impact

of these statements. In particular, little is known about how prospective students are accessing, interpreting and responding to them. Assessing the nature, extent and impact of inherent requirement statements is therefore central to understanding how Australian universities are promoting the participation of students with disabilities while complying with their legislative obligations and upholding academic standards.

This report represents the first stage of this research and analyses the prevalence, accessibility, and form of inherent requirement statements across the Australian university sector. We begin by considering the broader national context for this project, including the increasing participation of students with disability in higher education, and recent developments in employment law, education standards, and professional registration requirements. The origins of inherent requirement statements are examined with reference to key milestones associated with Curtin University, The University of Melbourne and Western Sydney University, and relevant literature is explored to situate university activities in relation to historical policy, legislative, and research trends. International literature is also examined to reveal the significant influence of overseas policies, particularly in the United States, on Australian legislators and educators.

FULL REPORT:

<https://www.ncsehe.edu.au/publications/the-role-of-inherent-requirement-statements-in-australian-universities/>



Not There Yet:

An Investigation into the Participation of Students from Humanitarian Refugee Background in the Australian Higher Education System

Dr Leslie Terry, Dr Ryan Naylor, Dr Nga Nguyen & Dr Alberto Rizzo

As a signatory to the United Nations 1951 International Convention on Refugees, Australia continues to accept significant numbers of Humanitarian refugees on an annual basis. Recent global developments in terms of conflict in many countries have exacerbated the issue of ‘forced migration’, with estimates indicating that up to sixty million displaced people are seeking refuge and protection for a variety of reasons at this present time. In this context, Australia has already taken steps to increase its planned annual intake by 12,000 (Syrians) in 2016 – 2017, taking the figure from 13,750 to anticipated 25,750.

Having experienced considerable displacement, including substantial educational disruption, in seeking refuge many of those individuals entering Australia will encounter barriers to their access and participation in the Higher Education system. However, recent researches have highlighted the fact that many of these Humanitarian Program entrants arrive as highly skilled and well-educated persons. While academic preparation is an important factor in success at university level, non-academic factors that refugee background students may possess, such as “grit” or determination, have been shown in several studies (Duckworth et al. 2007; Strayhorn 2015) to improve the chances of success, as well as substantially enriching university communities. Consequently, it is apparent from this research on the issue of participation of refugee background students in Australian universities, that a strengths-based approach provides the best framework for further ‘engagement’ with these individuals and communities.

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It is clear from a survey of the enrolment data collected by the Australian Government Department of Education and Training that refugee background students form a small but increasing proportion of the Australian higher education sector. Many come from an English as Another Language (EAL) background and are overwhelmingly located in low SES areas. However, it is argued here that the term ‘refugee’ bundles all communities and individuals into a monolithic group, and while it is the case that there are common barriers faced by these communities in achieving full participation in the higher education system in Australia, it is also apparent that the diverse communities are positioned differently in regard to their relationship with the university sector. Even though the higher education sector, and particularly the public universities, appear to be working



to widen participation and ensure that all students have a positive experience, it is the view of the authors of this study that existing university 'engagement' programs and strategies could be strengthened through a more focused, community-based rights and capacity building approach. Not only will this have the benefits of fostering links between universities and specific communities that have not been well represented in the enrolment intakes across the higher education sector, but it will also set a base for partnership research projects, as has been found in the experience of the Melbourne Refugee Studies Program since its inception in late 2014 (<http://mrsp.unimelb.edu.au/>).

The research highlights the fact that selected universities, have been active in creating pathways and reforming their curricula, for example, English as Another Language and

mentoring support, to be inclusive of refugee background students. It is the view of the researchers involved in this study that the work of these universities, which needs to be encouraged and supported further, provides model strategies and approaches that could also be adopted by other universities, such as those in the Group of Eight (Go8), in which students from refugee backgrounds are still clearly underrepresented.

This report reviews the literature and analyses enrolment data from the Australian Government Department of Education and Training and also refers to Census data from the Australian Bureau of Statistics (ABS), with a view to contributing to discussions about the future directions in policy and action, including the development of targeted outreach and engagement programs for refugee background students.



Emeritus Professor Michael Hamel-Green
Emeritus Professor in Social Inquiry, College of Arts
Victoria University

This new study of refugee student participation in Australian higher education is particularly timely and invaluable, given the new commitment that the Australian Government has made to increasing refugee intakes, particularly of Syrian refugees. From a public policy point of view, it is vital that there be a corresponding increase in educational access for refugees to acquire the training and qualifications necessary for finding employment and to avoid the problems generated by marginalisation. From the viewpoint of individual universities, the report makes carefully substantiated recommendations that need to be carefully considered and taken up by university administrations and faculties, not least: the need for culturally specific engagement (not only with individual refugee students but also with their respective communities); the need for teaching

practices and approaches that build on the strengths, experience, resilience and motivation of such students; and the need to make substantive improvements in the level and availability of support programs and services for refugee students, including financial support, mentoring and outreach programs. In the case of some areas of institutional practice, the study could have explored some further support models in greater detail, such as university based group and individual mentoring schemes as well as the community based ones referred to in the final recommendations. There is also the question of whether some universities (the Go8?), disproportionately low participation of refugee students due to imposing unnecessarily high English language entry requirements rather than providing refugee students with sufficient funded places in ESL or English for Academic Purposes programs and adequate ongoing English language support.

FULL REPORT: <https://www.ncsehe.edu.au/publications/an-investigation-into-the-participation-of-students-of-refugee-background-in-the-australian-higher-education-system/>



Capability, Belonging and Equity in Higher Education:

Developing Inclusive Approaches

Professor Penny Jane Burke, Dr Anna Bennett, Ms Cathy Burgess, Dr Kim Gray & Dr Erica Southgate

The problem with 'potential'

This project makes a unique contribution to understanding the more subtle dimensions of equity in higher education by examining constructions of 'capability' and experiences of 'belonging'.

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Student equity in higher education is often framed by constructions of capability that imply that intelligence, potential and ability is innate. The assumption that underpins many national widening participation agendas, namely that all students with the potential to benefit from higher education should have fair access to higher education regardless of social background, is problematic (Archer & Leathwood 2003). The problem rests in the suggestion that 'potential' to benefit from higher education is an attribute that can be straightforwardly identified in order to ensure fair access. It also implies that potential to benefit from higher education is about natural talent, ability and/or intelligence and is detached from social, cultural and educational dis/advantage and inequalities (Morley & Lugg 2009, p. 41).

The project

This mixed methods project draws on extant data from a 2014 pilot study examining students' beliefs about ability, intelligence and how this is related to levels of confidence. The extant data was generated through a survey instrument drawing on the work of Carol Dweck (2000; 2013). As part of the National Centre for Student Equity in Higher Education (NCSEHE) funded study, further qualitative data were generated. In total, 772 students were surveyed, 41 students took part in either focus groups or in-depth interviews and 19 university lecturers participated in focus groups or were individually interviewed (refer to Appendix A and B for demographic details).



The aim was to:

- explore and identify the different meanings attached to 'capability' in particular contexts (such as subject or course);
- consider the ways these meanings shape the experiences, practices and sense of belonging of students from non-traditional backgrounds; and
- help improve the educational opportunities and completion rates for university students from non-traditional (non-ATAR) and other educationally disadvantaged backgrounds through contributing a more nuanced understanding of capability.

Key findings and themes

Key findings from the survey:

- Students with a higher ATAR were more confident about their capability and less likely to question their intelligence.
- Approximately one-third of students surveyed in the last weeks of their first year of study did not feel confident about their academic ability.
- Enabling program students aged 20 years and older tended to have greater levels of confidence about their intellectual ability.
- Males were more likely to feel confident about their intelligence and capability than females.
- Mature age learners and students from non-traditional study pathways were more likely to have a strong growth view of their capability.

Key themes emerging from the qualitative analysis:

- Capability is deeply entwined with identity formations that are produced within, across and between different social contexts and spaces.
- Constructions of capability are contested and not fixed and stable but are tied to feelings of belonging and fitting in.
- Students are often aware of the ways that deficit discourses influence perceptions and judgments about capability.
- Teachers' expectations about students' dispositions to learning, time management and willingness to work hard can lead to the misrecognition of a student as lacking capability.
- Family influences are important in shaping confidence and feelings of capability but do not necessarily determine educational aspirations, expectations and success.
- Fear, shame and anxiety create feelings of lack of capability and not belonging for many students.
- Students feel most confident in an inclusive pedagogical environment in which trust is established and belonging is fostered.
- Discourses that blame individuals tend to exacerbate feelings of incapability in both teachers and students.
- Pressure on teachers to meet expectations of excellence and equity was described as stressful and highly challenging within existing structures.
- Academic confidence was seen to have a significant impact on students' academic success.
- Teaching staff perceived competing discourses of collaboration and competition as negatively affecting student capability.

Recommendations

- Based on the above findings and themes, the project recommends:
- Raising awareness across the Higher Education sector about the relationship between deficit discourses, assumptions and judgments about capability and students' level of confidence is vital for widening participation in higher education.
- It is important that universities pay closer attention to the ways that assumptions and judgments about capability might unwittingly reproduce inequalities in student access, participation and success.
- University lecturers must be appropriately supported by their institutions to develop pedagogical practices that create an environment of trust, belonging and inclusion.
- There needs to be greater emphasis on building confidence and a sense of capability for school-aged students from diverse and under-represented backgrounds.
- Schools and universities must proactively challenge stereotypes about the 'types' of students who are capable of university study.
- Opportunities, resources and support that enable capability, build confidence and foster belonging must be made available to students from diverse and under-represented backgrounds to build greater equity in higher education.
- Attention needs to be shifted away from blaming individual teachers and students to generating educational structures, cultures and practices that are underpinned by strong principles of equity and inclusion for both staff and students.

¹ Throughout this report we refer to 'teacher(s)' rather than 'lecturer(s)' or 'academic(s)', although sometimes these descriptors are used interchangeably. We do this intentionally, to foreground teaching, although we are aware that individuals who teach in higher education might not describe their role primarily as a 'teacher'.



Ms Ruth Tregale
Director, Widening Participation
Macquarie University

This research on "capability" is extremely timely at the date of publication in early 2016, as the

Federal Minister for Education revisits the debate on access to Higher Education, and there is much discussion around the Australian Tertiary Admission Rank (ATAR) as an indicator of future success. The paper provides valuable insights for every policy-maker, practitioner and academic throughout all levels of education, asking us to (re)examine what we really mean when we talk about the "capability" of students to succeed in their education, and to be aware that assumptions and judgments about capability can unwittingly perpetuate social and cultural inequalities in student access, participation and success, often in a subtle and insidious way.

The study makes a unique contribution to understanding the more subtle dimensions of equity in Higher Education by examining constructions of capability and demonstrating that these are multiple and contested, and often deeply connected to processes of educational exclusion; considering the ways these meanings shape the experiences, practices and sense of belonging of students from non-traditional backgrounds; and recommending that a more nuanced understanding of capability, accompanied by truly equitable and inclusive practices, is crucial to improve the educational opportunities and completion rates of these students - indeed for the success of the Widening Participation agenda per se.



Exploring the Experience of Low-SES Students via Enabling Pathways

Dr Chad Habel, Dr Kirsty Whitman & Ms Jennifer Stokes

Since the 1980s, Enabling Pathways have been one of the main ways that prospective students from low-SES backgrounds have been able to enter into universities. These programs, often known as Foundation Studies or Preparatory Programs, provide both access to generalist degrees and enabling experiences to enhance the potential for student success within degree-level studies. This project builds on qualitative research undertaken at the University of Adelaide to explore the experiences of low-SES students in these programs.

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Often the focus of analysis in these programs is quantitative: how many students, what retention rate, the numbers that pass into degree programs. Recent research has shifted the focus to a qualitative analysis of student experience in these programs, which unearthed rich data about SES, class, and students' sense of belonging (or not) in academic institutions that had always felt out of reach to them (Habel and Whitman 2016). This research returned to these same participants after they had experienced degree level-studies at their university, to explore their subsequent experiences in light of the previous findings. In addition, it sought to explore the experiences of students who didn't quite 'make it', and for one reason or another did not articulate into a degree. Finally, it compared the experiences of these students at the University of Adelaide with those who had undertaken a similar pathway at the University of South Australia, a very different institution with a distinct mission, structure and program.

The theoretical framework of this project drew on critical pedagogy, Bourdieusian field theory, and phenomenology. Paolo Friere's insights into 'pedagogy of the oppressed' are essential in dealing with low-SES students, and critical pedagogy encourages a focus on the systemic disadvantage that students occupy prior to entering formal education. Bourdieu's notion of 'habitus' is very useful to explore the deep assumptions in educational institutions and, again, their links to social systems and disadvantage. Finally, this project employed the insights of Phenomenology to allow a focus on the lived experience of students from low-SES backgrounds and they ways that they give meaning to the new experience of entering into university.

This research interviewed 20 students from the University of Adelaide and the University of South Australia who had participated in an Enabling Program. Six of these were re-interviewed from previous research, while 14 were interviewed for the first time, with six of those moving into Bachelor of Science degrees, a relatively uncommon pathway for students from enabling programs. Two of them had not progressed into degrees, for a variety of reasons, but had also been interviewed previously which provided a good opportunity to compare their experiences over time. A limitation of the sampling was that all these students were relatively high-achieving: it proved almost impossible to engage with students who had significantly struggled in their studies.

Participants partook in semi-structured interviews (usually located in the university) which lasted from an hour to an hour and a half. Those who had been interviewed previously were invited to review their transcript, and the broad findings of the previous research were used as a springboard for discussion. Those who had never been interviewed before were taken through a broadly chronological structure of discussion, aiming to elicit their experiences of university through reflecting on their past in the Enabling Program as well as their current degree-level experience.

Given the diversity of participants, the findings from this research were complex and multi-faceted. Every one of the participants remembered their experience of their Enabling Program with fondness and gratitude, and most expressed some feeling or experience of substantial transformation as a result as well as a sense that their Enabling Program laid the basis for a very positive and productive study career. However, the interviews elicited some troubling experiences of adversity which do not fit easily into a marketable narrative of social mobility through transformative education. Notable differences emerged between students from the University of Adelaide and the University of South Australia, including distinct responses to the branding of the respective universities as well as a sense of belonging to different organisational units based on structures unique to their institution. Overall, though, all the students interviewed had some balance of positive transformation as well as adversity which suggests that the 'social mobility' discourse present in institutional and public policy discourse needs further interrogation.



Professor Stuart Campbell
Emeritus Professor
Western Sydney University

This project tackles the difficult task of characterising the impact of enabling programs through the experience of low-SES students. A key message of the report is the diversity of student experience and the complexity of individuals' relationships with the institution. The transcript extracts tell stories of intense engagement with the job of learning, and as the report suggests, there is a common theme of transformation in the students' words. For any university with a mission of expanding access to disadvantaged students, there are several lessons in this report. One is that enabling studies appear to have positive and life-changing effect for those low-SES students who persist with their studies. Institutions would do well to replicate the report's methodology in order to monitor samples of students who have experienced enabling programs and to use the data to fine-tune those programs. In addition, institutions need to have realistic expectations about what enabling programs can achieve; students do not come in standard models, and the outcomes of these programs will be strongly influenced by lived experience. Finally, given the difficulty the report's authors had in investigating students who had withdrawn, institutions would be wise to build into their exit questionnaires items that explore whether withdrawing students had taken advantage of enabling programs, and how they evaluated them.

“ I never thought I'd get into the University of Adelaide when I was younger, because I thought, nup, I'm not good enough to get into the Uni of Adelaide. ”

- Participant

Supporting Students with Autism Spectrum Disorder in Higher Education

Dr Ceridwen Owen, Ms Damhnat McCann, Dr Christopher Rayner, Ms Carol Devereaux, Ms Fiona Sheehan & Dr Lyndsay Quarmby.

This project targets improvements in support for higher education students with Autism Spectrum Disorder (ASD) in light of the substantive existing and anticipated future growth of this population, and the failure of existing supports to meet their complex and unique needs.

Uniquely, the research extends existing research in disability supports and pedagogical initiatives to explore the design of the built environment as part of a holistic framework of support for students with ASD in higher education.

The research draws on a review of published literature combined with a cross sectional analysis of existing supports in Australian institutions and an in-depth analysis of the experience of students at one Australian university to identify key opportunities and gaps in the provision of support for students with ASD.

The key outcomes and recommendations of the research relate to the provision of holistic disability supports, pedagogical innovations, inclusive design solutions and the potential under the National Disability Insurance Scheme (NDIS) for funding to support students with ASD in higher education. These are outlined below.

Holistic Disability Supports

- The research supports the need to develop comprehensive supports for students with ASD that extend beyond academic skills to include social skills, self-management, advocacy and personal development.
- Peer-mentoring and transition support appear to be effective forms of support but need to be integrated within institutional support structures and maintained across the whole academic pathway. Further research is needed to compare existing programs within Australian higher education institutions and evaluate their success.
- A key gap is the level of awareness of ASD by staff and students. There is a need to develop ASD specific-information, resources and programs to build awareness of the issues experienced by people with ASD, develop skills in supporting students with ASD as staff and peers, and to foster a greater culture of inclusion.

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Pedagogical Innovations

- The learning styles and needs of students with ASD are diverse – one size does not fit all.
- Higher education students with ASD should be provided with multiple options for accessing content and engaging in learning experiences. The Universal Design for Learning (UDL) principles may provide a useful pedagogical framework to support students with ASD and the broader population of students.
- Teaching staff have a critical role to play in the wellbeing, academic attainment and retention of students with ASD. Greater awareness of and skills in working with students with ASD for teaching staff is vital.
- Higher education students with ASD should be supported in exercising agency and self-management of their learning. Opportunities include enabling choices in accessing content, supporting individual preferences in location within learning spaces, creating opportunities for structured (rather than forced) social interaction, and optimism regarding each student's potential, emphasising strengths rather than weaknesses.

Inclusive Design Solutions

- The built environment is a substantial factor in the experience of students with ASD and affects academic performance, social inclusion and health and wellbeing more broadly. Key issues include sensory overload from acoustic and visual stimuli, difficulties navigating campus and online environments, anxiety over forced social interaction and social isolation caused by self-exclusion from campus facilities such as cafeterias and libraries.

- Recent developments in the design of new learning spaces as dynamic, interactive, acoustically live and visually stimulating environments, mean that opportunities for retreat to more sensory calming spaces are critical. These need to be easily accessible and adjacent to, or even within, learning spaces. Consideration should be given to the provision of a range of smaller scale spaces distributed across campus to improve choice and accessibility. The design of larger learning spaces, such as lecture theatres, also needs to consider opportunities for discrete escape.
- Consideration needs to be given to the design of social amenities that enable students with ASD to participate in social life on campus, whether actively in smaller social settings, or passively by observing campus activities while being 'hidden from view'.
- Legibility needs to be considered in the design of campus and learning environments so that students with ASD can more readily 'make sense' of the environment. The provision of simple and consistent visual cues can facilitate orientation and navigation in both the physical and online environment.
- Many of the design needs can be met through minor modifications and through the identification and protection of existing spaces that address the needs of students with ASD.
- There are also clear benefits in the provision of a dedicated facility on campus as a 'safe space', particularly to meet the needs of students with medical conditions.
- It is important that issues relating to ASD are embedded in design guidelines to expand inclusive design and accessibility beyond the normative understanding of mobility and physical impairment.

NDIS

The type and scope of support available to students with ASD in higher education under the NDIS is unclear. Potential opportunities include the provision of expanded peer mentoring support to address the range of academic, communication, independent living, self-management and advocacy skills required by students with ASD. Opportunities also exist to expand transition support to encompass the range of 'micro-transitions' experienced across the entire academic pathway.

Further research needs to be undertaken to clarify the type of support available to higher education students with ASD under the NDIS. This will require research with a broader range of participants including individuals with ASD who have failed to access higher education despite academic competency and interest, and individuals who have entered higher education, but failed to graduate.



"I can cope with this unless I am tired or stressed."

- Participant 3



"This photo makes me think about how I spent a lot of the lesson trying to work out which way to sit... There are whiteboards almost the whole way around the room. This added to my confusion."

- Participant 6



Professor Andrew Cashin
Professor of Nursing,
Southern Cross University

Based on the literature, there is an emerging consideration of the reasonable adjustments that may be required to assist the transition to and through university for students with disability. Owen et al.'s survey of universities and best practice examples highlights that this is an area in urgent need of development and one in which there is a wide variance in practice in Australia. While needing to be viewed within the limits of a very small number of interviewees, gender disproportion and a small number of photos produced, the student interviews and photo diaries add an important element to the research and emphasises the need to consider the physical university space in which students participate.

The importance of promoting participation of students with ASD cannot be underestimated. As identified in the report, a high IQ and good ATAR is not enough; both nationally and internationally, workforce participation, including study, is notoriously low for adults on the spectrum. While supporting students with ASD at university is a relatively new focus of enquiry and practice, it is not so in the broader school system. In the context of the discussion of transition needs, reasonable adjustment of curricula and a deficit in teaching staff knowledge, it is curious as to why specialist educators do not form an essential and leading part of the disability practitioner team in universities. In the context of the discussion of safe spaces and impaired executive function impeding organisation, it is also curious as to why the homeroom models that have been so successful in high schools have not found their way into universities. It appears the boundary between high school and university for students with ASD needs to become more permeable, and that universities could adopt some of the practices that have led to successfully navigating the school system.

FULL REPORT: <https://www.ncsehe.edu.au/publications/supporting-students-with-autism-spectrum-disorder-in-higher-education/>





UNIVERSITY OF SYDNEY

Moving Beyond ‘Acts of Faith’:

Effective Scholarships for Equity Students

Dr Nadine Zacharias, Ms Mary Kelly, Ms Annette Cairnduff, Professor Brenda Cherednichenko, Dr Juliana Ryan, Dr Kelly George, Ms Smitha Mandre-Jackson, Ms Linda Gasparini & Mr Danny Sun

This study investigates the relationships between equity scholarships and the retention and success outcomes of recipients at three deliberately different universities, Deakin University, Queensland University of Technology and the University of Sydney, for the academic year of 2013. The key finding of this study is that equity scholarships are effective in retaining recipients, across the three universities, across demographic groups and across different scholarship products.

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The receipt of a scholarship reportedly reduced stress, boosted morale and allowed scholarship holders to dedicate more time to their studies at each of the universities. There were more varied results with regard to the success rates of recipients which may reflect design features of the scholarship products and programs and other variable institutional characteristics.

We undertook to investigate which types of scholarships were effective for equity groups. Rather than scholarship design features such as value, duration and timing of award, the most defining design element referable to student outcomes was a scholarship’s eligibility criteria, especially using Australian Tertiary Admission Rank (ATAR)/prior academic achievement (‘merit’) as a secondary selection criterion. The differences between equity and equity-merit scholarships matter because their selection criteria prioritise different sub-groups within equity groups: equity scholarships target those most disadvantaged and, thus, most at risk of leaving university prematurely. Equity-merit scholarships, on the other hand, target those disadvantaged students most likely to succeed because they have proven financial need and academic achievement at a high level. In our study, equity and equity-merit scholarships produced inverse student retention and success outcomes, i.e. equity scholarships had outcomes that were worse for those who got the highest value scholarships, whereas for equity-merit scholarships the outcomes were best for those students who received the most valuable scholarships.



Professor Gail Whiteford
Adjunct Professor, University of Canberra

The report *Moving Beyond Acts of Faith: Effective Scholarships for Equity Students* by Zacharias et al is very timely. The purpose of the research

described in the report was to add to the evidence base for equity scholarships which, to date, has been characterised by a paucity of detailed data. I found this report to be compelling reading for several reasons: first, some of the findings are unexpected – for example, that scholarship success is more powerful for the moderately needy. As the authors note, this is because those who are most financially deprived and had high degrees of life complexity need more than just financial supports; second, the data are drawn from three different universities (Deakin, QUT and Sydney) and the findings

reflect the different context and orientation of each; third, the insight that “simple scholarship architectures” are the most powerful from the students’ perspective, seems common sense but this has not been illuminated through rigorous research before.

Significantly, it seems that we are moving into an era where we can get past the “taken-for-grantedness” (to use the phenomenological concept) of scholarship provision and be informed institutionally – and hopefully politically – by fine grained, context related data. In such an era we will be able to mobilize resources more effectively with greater impact and recognise the unique identity, journey and concomitant needs of our diverse student groups.

In the allocation of equity scholarships a university effectively weighs up effort and risk in targeting and prioritising recipients. In addition to the importance of the selection criteria, the case studies illustrate that the more complex the institutional scholarship program, the less efficient is the administration of the selection process and the more difficult it is to evaluate relationships between scholarship product and student outcomes. Thus, the impetus is to design simple scholarship architectures with high volume products to generate effective student support, efficient processes and meaningful data.

Across institutions recipient type seemed to have more effect on student outcomes than scholarship type, with socioeconomic status, age, gender and basis of admission being categories that seemed to have a correlation with retention and success. Our findings suggest that a multi-factor assessment for scholarship eligibility is better than a single-factor one. Scholarships also have a value ‘beyond money’ in that latent potential can be realised if students have enough time to focus on their studies and receive a psychological lift from being recognised as worthy of the university’s support.

Universities and policy makers should consider that money does not overcome all barriers to participation and scholarships reach only a tiny minority of students. They need to be embedded in comprehensive support systems to

attract, retain and graduate students from financially and educationally disadvantaged backgrounds. The greatest contribution the Commonwealth can make is to provide consistent, predictable and appropriate levels of income support to all students by providing means-tested grants through the Centrelink system. There is great opportunity to build on these findings and explore the trends we found over time, and to assess and validate the observed relationships between scholarship types, recipient demographics and student outcomes using statistical and other methods.

Access and Barriers to Online Education for People with Disabilities

Dr Mike Kent

This paper reports on a study conducted in 2014 and 2015 that explored the accessibility of eLearning for students with disabilities studying fully online in Australia. The study looked at students studying through Open Universities Australia (OUA). OUA brings together 15 different independent higher education institutions to teach students fully online across a number of different fields. This diversity of institutions allowed a number of different eLearning environments, technologies and learning and teaching strategies to be canvassed.

The study had two phases. Firstly a survey that explored students' experience related to the accessibility of online learning and teaching platforms, and students' approach to disclosure of their disability and the effectiveness of any accommodation offered by the different institutions. The survey had 356 responses. The second phase of the research consisted of a series of 143 interviews that expanded on the information collected in the surveys and also explored the accessibility of different approaches to learning and teaching and assessment.

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Open Universities Australia invites students to nominate one of eight broad impairment categories when they identify themselves as a person with a disability these categories – mental illness, medical impairment, mobility impairment, hearing impairment, learning disability, vision impairment, acquired brain impairment (ABI) and intellectual disability – were used in the survey and interviews to provide different perspectives from students with these different impairment types. Each of these eight broad categories is individually addressed in this report.

The findings of this research indicated that student with disabilities found that online study through OUA was a preferred way to access higher education. There was an unexpectedly high incidence of students with a mental illness (44.9% of survey respondents) and medical impairments (39.2% of survey respondents), with mobility impairments rounding out the top three categories (25.3% of survey respondents). The finding of this prevalence was one of the



major findings of this study, along with the impact of different impairments on learning technologies, learning and teaching strategies and attitudes towards disclosure.

The report presents a number of recommendations related to policy and compliance, staff training, unit design, and assessment design and implementation. It also calls for further directions for research including the development of universal design in eLearning, and the need for further research to provide a voice for staff at universities in relation to access for students with disabilities.

Type of disability or impairment

| | |
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| Hearing impairment | 10.2% |
| Vision impairment | 7.2% |
| Mental illness | 44.9% |
| Learning disability | 8.7% |
| Medical impairment | 39.2% |
| Intellectual disability | 1.8% |
| Mobility impairment | 25.3% |
| Acquired brain impairment | 4.5% |



Dr Cathy Stone
2016 NCSEHE Equity Fellow
University of Newcastle Australia

I would like to congratulate Dr Mike Kent on this important and comprehensive report into the experiences of students with disability studying online through Open Universities Australia (OUA). His report illustrates that for many students with disability, the option of online studies has provided an opportunity for them to study at university, when they might not otherwise have been able to do so. This is a very important finding in itself, as it bears out the importance of the place of online learning in widening access and participation for underrepresented student cohorts. The recommendations provided in this report will no doubt be of great value not only to OUA and its provider universities, but to all universities offering online courses and programs in general. Understanding that many students with disability – including a high proportion of students with a mental health disability – are actively choosing online studies, means that it is incumbent upon higher education institutions to examine their policies and practices to ensure that the experience of students with disability is a positive and successful one. This includes policies and practices in relation to accessible and inclusive online design, teaching methods, support mechanisms and staff training and awareness, so that all students can benefit equally from the opportunity that online learning can provide.

Acronyms

| | |
|--------------|---|
| ABI | Acquired Brain Impairment |
| ABS | Australian Bureau of Statistics |
| ACER | Australian Council for Educational Research |
| ADCET | Australian Disability Clearinghouse on Education and Training |
| ARC | Australian Research Council |
| ASD | Autism Spectrum Disorder |
| ATAR | Australian Tertiary Admission Rank |
| ATEND | Australian Tertiary Education Network on Disability |
| AUD | Australian Dollars |
| AUQA | Australian Universities Quality Agency |
| BA | Bachelor of Arts |
| CALD | Culturally and Linguistically Diverse |
| CI | Chief Investigator |
| CQU | CQUniversity Australia |
| DAP | Disability Action Plan |
| DU | Disability Unit |
| EAL | English as Another Language |
| ERA | Excellence in Research for Australia |
| ESL | English as a Second Language |
| ESCAP | Economic and Social Commission for Asia and the Pacific |
| FiF | First in Family |
| Go8 | Group of Eight |
| HE | Higher Education |
| ICT | Information and Communication Technologies |
| IEU | Indigenous Education Units |
| ILO | International Labour Organization |
| IRS | Inherent Requirement Statements |
| IT | Information Technology |

| | |
|----------------|--|
| LAP | Learning Access Plan |
| LMS | Learning Management System |
| LSAY | Longitudinal Surveys of Australian Youth |
| Low SES | Low Socio-economic Status |
| LSES | Low Socio-economic Status |
| MA | Master of Arts |
| NCSEHE | National Centre for Student Equity in Higher Education |
| NDIS | National Disability Insurance Scheme |
| NESB | Non-English Speaking Backgrounds |
| NGO | Non-Governmental Organisation |
| NHMRC | National Health and Medical Research Council |
| OECD | Organization for Economic Cooperation and Development |
| OLT | Office for Learning & Teaching |
| OUA | Open Universities Australia |
| PhD | Doctor of Philosophy |
| QUT | Queensland University of Technology |
| RMIT | RMIT University |
| SES | Socio-economic Status |
| SPSS | Statistical Package for the Social Sciences |
| STEM | Science, Technology, Engineering, Mathematics |
| UDL | Universal Design for Learning |
| UK | United Kingdom |
| UN | United Nations |
| UNSW | University of New South Wales |
| USC | University of the Sunshine Coast |
| UTAS | University of Tasmania |
| VET | Vocational Education Training |
| WMD | Weapons of Mass Destruction |

Biographies



Professor Sue Trinidad

Professor Sue Trinidad is the Director of the National Centre for Student Equity in Higher Education, hosted by Curtin University. An established scholar in the areas of higher education pedagogy and change management, the use of technology and student learning, Sue's research

covers higher education and leadership, including the use of technology for regional, rural and remote areas to provide equity access to all students regardless of their geographical location. Prior to becoming the NCSEHE's Director, Sue was Deputy Pro-Vice Chancellor and Dean of Teaching and Learning in the Faculty of Humanities at Curtin during 2007-2012.



Professor Sue Kilpatrick

Professor Sue Kilpatrick was Pro Vice-Chancellor (Students) at the University of Tasmania until December 2015, where she is now a part time research professor in the Faculty of Education. She holds a PhD in the economics of education. Over 20 years' experience as a researcher in rural

and regional post compulsory education, social capital, rural community development and rural health, and 80 plus research grants have resulted in publications with over 2,860 citations. Sue's social capital and education research have influenced national and state government education and regional development policies.



Professor John Phillimore

Professor John Phillimore is the Executive Director of the John Curtin Institute of Public Policy (JCIPP) at Curtin University and works on a range of public policy issues including federalism, higher education policy, public sector management, innovation and technology policy, and the

Australian welfare state. John is NCSEHE Program Leader for Program 2 – Equity Policy and Research Program and oversees the NCSEHE's Student Equity in Higher Education Research Grants Program.



Dr Susan Johns

Dr Susan Johns is Lecturer Access and Social Inclusion in the Division of the Deputy Vice Chancellor Students and Education, the University of Tasmania. She has published over 40 national and international journal articles, conference papers and book chapters on transition

and access to higher education. Her research interests include education and social capital, leadership, and alternative pathways to higher education.



Mr Paul Farnhill

Mr Paul Farnhill is an economist and Policy Analyst with wide experience in policy issues in government and industry. Paul worked for the Financial Times newspaper in London before joining the Western Australian Government in a range of roles in economic development and policy

analysis. He has also been a political speech writer and advisor to Ministers and Premiers.



Dr Robin Barnes

Dr Robin Barnes is currently working at the University of Tasmania as part of the Access, Participation and Partnerships theme area of the Division of Students and Education and has also worked as a fish physiologist at the university. Her current research focuses on access and social

inclusion to higher education including student aspirations, parental engagement, pathways and working in rural and regional areas. Robin has a PhD in Aquaculture Nutrition from the UTAS.



Ms Darlene McLennan

Ms Darlene McLennan has over 10 years' experience in the further education and disability sector and is the National Disability Coordination Officer for northern Tasmania and manages the Australian Disability Clearinghouse on Education and Training www.adcet.edu.au. She also

is the current president of the Australian Tertiary Education Network on Disability (ATEND) which is the peak professional organisation for disability practitioners in the tertiary sector. Darlene has completed post graduate studies in Careers Education and Development at RMIT and also has completed a Master of Business at the University of Tasmania. In 2016 she is undertaking a post graduate certificate in Disability inclusion at Griffith University.



Ms Sarah Fischer

At the University of Tasmania, Ms Sarah Fischer is a project officer under the Access, Participation and Partnerships theme within the Division of the Deputy Vice-Chancellor (Students & Education), a lecturer at the Institute for Marine and Antarctic Studies and in the Centre for University

Pathways and Partnerships. Her current research efforts are focused on determining best practices for increasing children's educational aspirations through effective engagement and information programs for low SES parents. Sarah has an M.A. in International Environmental Policy Studies from the Middlebury Institute of International Studies and a B.A in Spanish from Middlebury College.



Ms Kerri Magnussen

Ms Kerri Magnussen is currently undertaking her PhD at the University of Tasmania. Her research focuses on the interpretation of typical ASD behaviour in the criminal justice system. Kerri completed her Bachelor of Arts (Justice Studies) at Queensland University of Technology in 1997. She

completed her Graduate Diploma in Science (Psychology) in 2012, and her Bachelor of Behavioural Science (with Honours) in 2014.



Dr Ann Stewart

Dr Ann Stewart has a background in education having worked in New Zealand, the UK and Australia in roles that span across the schools sector, special education, Aboriginal education and higher education. Prior to her retirement in March 2016, and after a two year period of providing

consultancy services to the corporate and tertiary sectors, Ann held the role of Head, Student Access, Equity and Diversity at the University of the Sunshine Coast, where she implemented a number of initiatives, including a University strategy for Pathways and Access incorporating Widening Participation activities.



Dr Sarah Richardson

Dr Sarah Richardson (PhD Melbourne, MA Amsterdam, BA (Hons) Liverpool) is an experienced higher education researcher who leads multiple projects around the world, including quantitative and qualitative data collection and analysis, learning outcomes assessment, national and

international policy research and the measurement of graduate outcomes. After five years working at ACER in Melbourne, Sarah has now taken on the role of Research Director of ACER India and is based in Delhi. Sarah has a particular interest in international education and her latest book, *Cosmopolitan Learning for a Global Era*, has recently been published by Routledge.



Professor Dawn Bennett

Dawn Bennett is John Curtin Distinguished Professor of Higher Education, Director of the Creative Workforce Initiative and Chair of the Curtin Academy at Curtin University in Perth, Australia. Her research focus is on developing employability within higher education learning and teaching,

including identity development and the nature of graduate work. Dawn is also a passionate advocate for the inclusion of Indigenous cultural competencies within higher education. An Australian Learning and Teaching Fellow and Principal Fellow of the Higher Education Academy in the United Kingdom, she serves numerous editorial boards and convenes the Australian Learning and Teaching Fellows' national network. Her research outputs include 150 scholarly articles and research reports, including 10 monographs or edited collections. Publications are regularly updated at Academia.edu.

Biographies



Associate Professor Lynne Roberts

Lynne Roberts is an Associate Professor in the School of Psychology and Speech Pathology and the Director of Research in Higher Education in the Faculty of Health Sciences at Curtin University. She is an OLT National Teaching Fellow and a Curtin Academy Fellow. Lynne is an

active researcher on topics related to teaching and learning in higher education, with particular interests in research methods pedagogy, dissertation supervision and learning analytics. Lynne teaches research methods to psychology honours students and supervises Masters and PhD students on higher education topics including transformative learning and interprofessional education.



Dr Hannah Forsyth

Dr Hannah Forsyth is Lecturer in History at the Australian Catholic University (ACU) and author of *A History of the Modern Australian University* (NewSouth, 2014). Hannah held a postdoctoral fellowship at the University of Sydney in 2013, based in the Social Inclusion Unit where, in addition

to her own research, she worked with staff to help develop a scholarly culture around equity in higher education. Hannah's research seeks to address social and economic inequality through an understanding of the historical forces that have structured the present. Her teaching at ACU focuses on community engagement and inclusion of diverse student voices in history.



Assistant Professor Ian Li

Dr Ian Li is an economist based at the School of Population Health at The University of Western Australia (UWA). He has research interests in health, education and labour economics, including research into higher education equity issues and the graduate labour market. Ian's research has

been funded by nationally competitive schemes, such as the NHMRC. He has been a chief investigator on grants totalling AUD\$1.6million between 2012-2016, and his research has been published in *Education Economics*, the *Australian Economic Review* and the *Australian Health Review*. In 2015, Ian received the UWA Vice-Chancellor's Early Career Investigator award, in addition to four competitive teaching awards between 2010-2015.



Dr Stéphane Mahuteau

Stéphane Mahuteau is a Senior Research Fellow at the National Institute of Labour Studies, Flinders University. He obtained a PhD in Economics from the University of Lyon II, France in 2002. His current research focuses on themes such as labour market outcomes of immigrants, job and skills/

qualification matching, economic policy evaluation, the effect of socio-economic background on students' achievement in high schools, "value-added" of high schools and the determinants of students' choices of tertiary education. He produced reports for the Gonski Review of School Funding. In 2013, he undertook a quantitative analysis of illegal work performed by non-residents in Australia on behalf of the Department of Immigration. He is currently a member of the independent research team which has been appointed by the Department of Social Services to evaluate the new National Disability Insurance Scheme.



Associate Professor Mike Dockery

Associate Professor Alfred Michael (Mike) Dockery is Principal Research Fellow with the John Curtin Institute of Public Policy, NCSEHE Program Leader for Program 3 – Student Equity Data and Analysis, and leads the Cooperative Research Centre for Remote Economic Participation's project

on Indigenous mobility. Mike is also part of the research team at the Bankwest Curtin Economics Centre, where his research pursuits include the school-to-work transition, the effects of work and other labour market experience on happiness and wellbeing, and Indigenous labour market and social outcomes.



Professor P.N. (Raja) Junankar

Professor P.N. (Raja) Junankar is an Honorary Professor in the Industrial Relations Research Centre, Business School, at UNSW Australia; Emeritus Professor at Western Sydney University; and a Research Fellow of the Institute for the Study of Labour (IZA), Bonn, Germany. Raja has

held teaching and research positions in universities in Britain, Canada, France, India, and the United States. He has published in national and international journals including the *Economic Journal*, *Oxford Economic Papers*, *Economica*, and the *Journal of Development Studies*, written a number of books, and been a consultant for the OECD, ILO, ESCAP, United Nations, European Commission, and several Australian Federal Government agencies.



Professor Kostas Mavromaras

Professor Kostas Mavromaras is the Director of the National Institute of Labour Studies at Flinders University. Prior to Flinders Kostas held appointments at the universities of Melbourne, Aberdeen and Newcastle upon Tyne. He works on the economics of human capital, including

employment, skills, education, productivity, growth, age, health, disability, insurance, retirement and several specific workforces. He is the lead CI of the 2013-2017 NDIS trial Evaluation (including the Barkly region), a major evaluation funded by the Australian Government Department of Social Services, and of several ARC projects. Kostas publishes consistently in top international journals and consults widely nationally and internationally.



Mr Andrew Norton

Mr Andrew Norton is the Higher Education Program Director at the Grattan Institute. With Dr David Kemp, he was the government-appointed co-reviewer of the demand driven system. The *Review of the Demand Driven System Final Report* was released in April 2014. Mr Norton is

the author or co-author of many articles, reports and other publications on higher education issues. These include a widely-used reference report on higher education trends and policies, *Mapping Australian higher education*, *Graduate Winners* on the public and private benefits of higher education, and *Doubtful debt: the rising cost of student loans*.



Dr Neal Dreamson

Dr Neal Dreamson is a Senior Lecturer in the School of Curriculum, Faculty of Education, at Queensland University of Technology. Through his interdisciplinary research and engagement in cultural/religious studies, Indigenous education, philosophy, design and technology education, and

ICT in education, Dr Dreamson has articulated meta-cultural methodology for intercultural education and technological integration. Recently, he has researched metaphysical understandings of intercultural education and the digital divide in Learning Management Systems in addition to developing philosophical understandings of and pedagogical approaches to value interactions.



Associate Professor Gary Thomas

Associate Professor Gary Thomas is the Associate Director, Academic Indigenous Knowledges at the Queensland University of Technology. He has previously worked at the University of Southern Queensland, the University of Melbourne and La Trobe University where he held dual Directorships

in Indigenous Education and Equity and Student Support Services. He was the senior manager responsible for a portfolio of university wide services including Indigenous Education, Disability Services, Counselling, Student Health Promotion, the Office of Student Complaints, Equal Opportunity for Women in the Workplace, Anti-Discrimination Training and Complaints Handling. As the Associate Director, Academic Indigenous Knowledges, he promotes, develops and supports the inclusion of Aboriginal and Torres Strait Islander Knowledges across the curriculum at QUT.



Professor Anita Lee Hong

Professor Anita Lee Hong is a descendant of the Badjalla language group located throughout Queensland. Born in Cairns, Far North Queensland, Anita was educated in Cairns and has spent most of her life there until she moved to Perth in March 2002. She completed a Masters of Human

Rights Education in 2006, a Graduate Certificate of Tertiary Teaching in 2003 and a Bachelor of Applied Science Indigenous Community Management and Development (Vice-Chancellor's List) in 2002 at Curtin University. Anita is currently Director of the Oodgeroo Unit, a position she commenced in July 2010 after eight years of living and working in Perth where was the former Associate Professor/Director at Curtin University's Centre for Aboriginal Studies.

Biographies



Ms Soyoung Kim

Ms Soyoung Kim is a researcher in the field of early childhood education. Soyoung holds a master (by research) degree in cross-cultural comparative approach to early childhood for sustainability. Her research expertise lies in the areas of early childhood curricular, sustainability education, and

culturally inclusive education. Her current research is to develop a culturally inclusive curriculum through investigating early childhood curricular and cultural assumptions of culturally distinctive countries. She is currently working as a research assistant in Faculty of Education, QUT and as a teacher in a childcare centre.



Dr Diana Grace

Dr. Diana Grace is currently responsible for research and evaluation within the Office of the Dean of Students at the University of Canberra. She has a background in social-developmental psychology, and has published journal articles and book chapters in both psychology and education. She has

designed and taught modules on Indigenous Psychology, and in 2014 was awarded a Citation for Outstanding Contributions to Student Learning. Diana grew up in Dhungatti country and saw social inequalities from an early age. This prompted her concerns for social justice issues, and continues to drive her commitment to Indigenous Australians.



Dr Maria Raciti

Dr Maria Raciti is an Associate Professor in Marketing in the School of Business at the University of the Sunshine Coast. Maria is Co-leader of USC Indigenous Studies Research theme and her research interests include services marketing, social marketing and higher education.

She regularly publishes in quality refereed journals and has numerous refereed conference papers, five of which have received outstanding paper awards. Dr Raciti is an Aboriginal woman and was the first Indigenous PhD graduate from CQU, the inaugural USC OLT citation recipient and the inaugural Associate Dean (Learning and Teaching) in the USC Faculty of Arts and Business.

Ms Cheryl Godwell



Ms Cheryl Godwell is a direct descendant of the Kokobera people, born on Kalkadoon land in Mount Isa central west Queensland. Graduating from QUT with a Bachelor of Social Science (Majoring in Human Services), Cheryl spent over 13 years working for the Commonwealth Government across a wide range of portfolios as middle manager of

numerous policies, programs and initiatives. In 2011, Cheryl commenced working to Australia's first Pro Vice-Chancellor of Indigenous Leadership, Professor Steven Larkin at Charles Darwin University (CDU) and continues as the Manager of the Office of Indigenous Student Services providing essential support to CDU's Indigenous VET and HE students.



Associate Professor Michele Fleming

Associate Professor Michele Fleming is the Dean of Students and Director, Student Engagement Directorate at the University of Canberra. Michele's role encompasses the development of initiatives, programs and policies designed to support and improve the student experience. Michele

also has responsibility for the University's student support services and its widening participation strategy and programs. Michele publishes in the areas of equity and outreach and has been awarded number of competitive grants to conduct a range of outreach programs to assist with breaking down barriers to higher education for Aboriginal and Torres Strait Islander peoples and people from low socio-economic status backgrounds.



Mr Matt Brett

Mr Matt Brett is Senior Manager of Higher Education Policy at La Trobe University. He has specific equity policy interests in regional, disability and mental health issues and previously prepared the University of Melbourne's Social Inclusion Plan, Mental Health Strategy and Disability Action

Plan. Matt convened the National Summit on the Mental Health of Tertiary Students in 2011. Matt has experience as a policy adviser, university manager, equity practitioner, and academic researcher. Matt with Andrew Harvey, co-edited the book Student Equity in Australian Higher Education: Twenty-five years of A Fair Chance for All. Matt is currently a doctoral candidate undertaking research into financing policy reform in Australian higher education.

**Dr Andrew Harvey**

Dr Andrew Harvey is Director of the Access and Achievement Research Unit at La Trobe University. He has a Bachelor of Arts (Honours) and PhD in Politics. Andrew has published widely in areas of higher education policy, including issues of access, student retention, regionality,

and teacher education. He previously served as Director of Regional Operations at La Trobe and Executive Officer of the Australian Council of Deans of Education. Andrew's recent research publications have focussed on: early university offers to under-represented students; the achievement of students from non-English speaking backgrounds; predictors of student attrition; postgraduate student equity; and outcomes of tertiary enabling programs.

**Dr Andrew Funston**

Dr Andrew Funston is Senior Lecturer and Transition Coordinator in the College of Arts, Social Sciences and Commerce at La Trobe University, Melbourne Australia. Andrew has 25 years' experience working with 'first in the family' and low SES background university students. His work

focuses on approaches to teaching and learning best suited to commencing students from diverse backgrounds. His publications in this area include Funston (2012) Non-traditional students making their way in higher education – An Australian case study (Youth Research Centre, University of Melbourne), and Funston, Gil and Gilmore (2014) Strong Starts, Supported Transitions and Student Success (Cambridge Scholars Publishing).

**Ms Rachael Spicer**

Ms Rachael Spicer is Manager of the Access and Achievement Research Unit at La Trobe University. She has a Master of Business Administration and a Bachelor of Science. She has consulted to a range of government, not-for-profit, and commercial organisations. She was Project Manager

for a federal government program delivering training to seniors across 1,600 sites Australia wide. Since joining La Trobe, Rachael's research activities have focused on: the inherent requirements of courses; tertiary admission practices; and care leavers in higher education. Her current role includes managing programs to improve higher education outcomes for students from an out-of-home care background.

**Mr Adam Wood**

Mr Adam Wood has a Bachelor of Science in Mathematics and Statistics (Honours) from La Trobe University. While working in the Access and Achievement Research Unit at La Trobe, Adam's research activities have focussed on the inherent requirements of courses; and regional education standards.

Adam has commenced a PhD in the field of differential geometry at Melbourne University.

**Mr Trevor Allan**

Mr Trevor Allan has been a leader in the disability, equity and education sectors for over 20 years. Trevor has championed the cause of independent and universal access for people with disabilities, written extensively and presented papers and keynotes at many conferences. He has

coordinated research projects, been a member of government advisory committees, and a key contributor to the University of Western Sydney's (UWS, now known as Western Sydney University) Inherent Requirements projects. Trevor was awarded the Vice-Chancellor's Award for Career Achievement at the 2006 Australian National University Staff Excellence Awards, a UWS Vice-Chancellor's Excellence Award in 2011 and a UWS Outstanding Contribution to Teaching & Learning Award in 2012. In 2014, Trevor became the first Life Member of the Australian Tertiary Education Network on Disability.

**Dr Leslie Terry**

Dr Leslie Terry has a PhD from the Centre for Multicultural Studies at the University of Wollongong. In 2015, he was Coordinator & Research Fellow at The University of Melbourne's Melbourne Refugee Studies Program, and was previously a Senior Lecturer at Victoria University, overseeing

the development of course offerings in sociology, policy studies and international community development. In 2005/06, he was Chair of Australian Studies at the University of Tokyo. In 2001, he was a Visiting Professor at the University of Linköping, advising on the development of programs for the integration of refugee background communities into the Swedish Education system. Dr Terry was recently appointed as the 2015 EU Scholar in Residence by the University of Melbourne's EU Centre On Shared Complex Challenges and is currently based at the university's Asia Institute. His research interests include schooling and CALD communities, university teaching for social justice, identity and multiculturalism.

Biographies



Dr Ryan Naylor

Dr Ryan Naylor is an Educational Developer at Victoria University. At the time of research, he was a Lecturer in Higher Education with the Melbourne Centre for the Study of Higher Education at The University of Melbourne. His current research focuses primarily on student equity and the student

experience. His recent major projects include an OLT-funded project looking at new constructs and techniques for examining the student experience, the Critical Interventions Framework Part II (in collaboration with The University of Newcastle Australia and LaTrobe University, building on his previous work on Part I), researching equity practitioner's attitudes to and capacity for program evaluation, and a research project examining the participation of refugees in Australian higher education. He is currently researching indicators for attrition and conceptions of student success among non-traditional students. In 2014 and 2015, Ryan was a Visiting Fellow at the National Centre for Student Equity in Higher Education.



Ms Nga Nguyen

Ms Nga Nguyen, is a research officer at Cancer Council Victoria with a PhD degree in Epidemiology from The University of Texas and a MS degree in Bioinformatics from the London School of Economics. MS Nguyen is also working as honorary research assistant at Doherty Institute of

The University of Melbourne. MS Nguyen has over 10 years of experience in research and teaching in variety of public health and epidemiology areas such as HIV/AIDS, children malnutrition, children injury and health information technology interventions. She's especially skilled in data management and data analysis. She is currently working in applied wearable technology in cancer patients' health promotion topics which she would pursuit as her long-term career development.



Dr Alberto Rizzo

Alberto is a teacher-educator and Clinical Specialist at the Melbourne Graduate School of Education. He has doctorate and other postgraduate qualifications and teaching experience in Applied Linguistics, Languages Other than English, English as an Additional Language and the use of digital

technologies to support pedagogical practices across all learning areas. Having migrated to Australia with his family as a 14 year old, Alberto's professional career has been characterised by the pursuit of social justice for educationally vulnerable groups, especially immigrant and multicultural communities. For a number of years Alberto worked for the Victorian Multicultural Education Services unit providing advice and support to teachers and schools across the State on inclusive curriculum. He has been involved in partnerships and education research projects with homeless and other disadvantaged groups at a Brotherhood of St. Laurence's 'drop in centre', and has also established high-technology programs for youth on the autistic spectrum. In addition to his involvement in teacher education, Alberto has been working as a volunteer Home-English Tutor with the Asylum Seekers Resource Centre.



Emeritus Professor Michael Hamel-Green

Professor Michael Hamel-Green is Emeritus Professor in Social Inquiry in the College of Arts at Victoria University in Melbourne, Australia. He was the Executive Dean of the Victoria University Faculty of Arts, Education and Human Development from 2008 to 2012, and prior to that the

Deputy Dean from 2005 to 2007. His teaching areas include international security, conflict resolution, and community development. Professor Hamel-Green is the Communications Editor of the Routledge journal *Global Change, Peace and Security*. Recent publications include *Australia's Disarmament Dilemma: Nuclear Umbrella or Nuclear-Free* (International Law and Policy Institute, 2014) and "Cooperating Regionally, Denuclearizing Globally: Multilateral Nuclear-Weapon-Free-Zone Initiatives" in a new book, *International Cooperation on WMD Nonproliferation* (University of Georgia Press, Athens, 2016), edited by Jeffrey Knopf. He is also the Convenor of the Curatorial Committee of the recently established, Australian Living Peace Museum (www.livingpeacemuseum.org.au).

**Professor Penny Jane Burke**

Professor Penny Jane Burke is Global Innovation Chair of Equity and Director of the Centre of Excellence in Equity in Higher Education at The University of Newcastle Australia. Penny is dedicated to developing frameworks that support critical understanding and practice of equity and

social justice in higher education. She has published extensively in the field and is Editor of international journal *Teaching in Higher Education* and co-Convenor for the Society for Research in Higher Education. Prior posts include Professor of Education at the University of Roehampton, the University of Sussex and Reader of Education at the Institute of Education, University of London.

**Dr Kim Gray**

Dr Kim Gray is a lecturer in sociology and researcher at The University of Newcastle Australia, currently teaching in the Open Foundation program, English Language and Foundation Studies Centre, and previously in a number of undergraduate sociology courses. Her earlier research interests and

publications focussed on constructions of identity, race and cultural belonging particularly in relation to the diverse lived experiences of Australian intercountry adoptees. In recent years, Kim has been involved in projects about access and equity in higher education, exploring constructed meanings about student 'capability' and the educational and cultural challenges experienced by refugee students.

**Dr Anna Bennett**

Dr Anna Bennett is Senior Lecturer and Convenor of the Open Foundation program at The University of Newcastle Australia. Anna has a PhD in Sociology (UNSW). In addition to leading the Critical Interventions Framework Part II (2015), she is involved in various research projects, including

a current National Priority Pool project led by CQUniversity Australia. Anna's latest (2015) book is a co-edited collection entitled *Widening Higher Education Participation: A Global Perspective*. Anna is Editor of the *International Studies in Widening Participation* journal and a member of the editorial board for the journal *Teaching in Higher Education*.

**Dr Erica Southgate**

Dr Erica Southgate is a Senior Lecturer in the School of Education at The University of Newcastle Australia. She has extensive experience in conducting qualitative, ethnographic and mixed method research on social disadvantage and marginalisation in the fields of health and education. Her

most recent publications include an edited book on global perspectives in widening participation in higher education, and scholarly articles on access to high status degrees for people who would be the first in their family to attend university, and the deconstruction of key concepts in higher education policy such as 'aspiration', 'capability' and 'choice'.

**Ms Cathy Burgess**

Ms Catherine Burgess is the Convenor of The University of Newcastle Australia's UONPREP/Bridging program that offers specifically designed short courses for over 1,000 students entering university. Catherine has written and developed science-based courses for a range of

programs and was awarded the Vice-Chancellor's Citation for Outstanding Contributions to Student Learning in 2012. Catherine's area of research includes promoting reflective laboratory experiences to improve the understanding of chemistry and has presented at two recent conferences and published in the *International Journal of Innovation in Science and Mathematics Education* on the role of specifically designed laboratories for enabling students.

**Ms Ruth Tregale**

Ms Ruth Tregale is Director of the Widening Participation Unit at Macquarie University. She holds a postgraduate diploma in Community & Youth Work, and a Masters Degree in Sustainable Development. Through previous roles with a global NGO and the UN Commission on Sustainable

Development, Ruth is very aware of the role of education in achieving sustainable development. She is passionate about ensuring that everyone has the opportunity to access and succeed in tertiary education, regardless of background or current socio-economic status. Ruth's current research focus is on the transition of students from refugee backgrounds into higher education.

Biographies



Dr Chad Habel

Dr Chad Habel is the Coordinator of the University Preparatory Program in the Faculty of Arts at the University of Adelaide. With a PhD in English, his current research interests are enabling education, educational technologies, and game-based learning.



Dr Kirsty Whitman

Dr Kirsty Whitman is an early career academic at the University of Adelaide who lectures in the University Preparatory Program. Her research interests include social class, educational transformation, masculinities, gender, intersectionality theory, and emotion work. Her current

research focus is on intersections of class and gender in education transformation and working-class men's emotion work in changing industrial landscapes.



Ms Jennifer Stokes

Ms Jennifer Stokes is a Foundation Studies Program Coordinator at the University of South Australia. Her publications focus on media engagement, critical pedagogy, and widening participation. Jennifer has considerable experience working with students from equity groups and is

passionate about educational access and the role universities can play in social inclusion and societal betterment.



Emeritus Professor Stuart Campbell

Emeritus Professor Stuart Campbell is a higher education expert with more than three decades of industry experience. His university career combined excellence in executive management, research and teaching, culminating in his term as Professor of Linguistics and Pro-

Vice Chancellor (Learning and Teaching) at Western Sydney University. He played a leading role in preparing the university for two AUQA audits. His areas of research specialisation are translation studies and Arabic linguistics. He currently divides his time between higher education governance roles and writing fiction.



Dr Ceridwen Owen

Dr Ceridwen Owen is a Senior Lecturer and Program Director (Architecture) in the School of Architecture & Design at the University of Tasmania. Ceridwen's research focuses on inclusive design with a particular specialist interest in design and Autism Spectrum Disorder. She is experienced in

qualitative methodology including the visual-based research method of photovoice, which she has employed on a number of projects to explore experiential aspects of place. Ceridwen is also a registered practising architect and a partner with Core Collective Architects and has more than 15 years of experience in architectural practice.



Ms Damhnat McCann

Ms Damhnat McCann is a Senior Lecturer in the School of Health Sciences, University of Tasmania with a clinical background in paediatric nursing. Damhnat's research focuses on the support needs of children with complex needs and their families and she has published a number of papers in

this area. She has recently completed a PhD exploring the time use and home life of parents of children with complex needs with a focus on Autism Spectrum Disorder.



Dr Christopher Rayner

Dr Chris Rayner is a Lecturer in Inclusive Education at the University of Tasmania. He has published in a number of international peer-reviewed journals, such as *Research in Autism Spectrum Disorders*, *Developmental Neurorehabilitation*, *Australasian Journal of Special Education*, and *Asia-Pacific Journal*

of Teacher Education. With a particular interest in learning and teaching for students with Autism Spectrum Disorder, Chris' current research interests relate to equity and engagement in education across the lifespan.

**Ms Carol Devereaux**

Ms Carol Devereaux is a Disability Adviser at the University of Tasmania. Carol has worked with students with disabilities on the Sandy Bay campus for the past five years and previously as a Student Adviser with the Faculty of Arts assisting students transitioning into the university. In 2014,

Carol worked with Ms Fiona Sheehan on a pilot project that looked specifically at identifying available resources for training and supporting staff working with students with Autism Spectrum Disorder. In conjunction with Autism Tasmania, a pilot workshop was subsequently delivered to key academic staff at the University of Tasmania.

**Ms Fiona Sheehan**

Ms Fiona Sheehan is a Disability Adviser at the University of Tasmania. Fiona works with students on the northern Newnham campus and has a particular interest in Autism Spectrum Disorder and associated mental health conditions. In 2014, Fiona worked with Ms Carol Devereaux on a pilot

project that looked specifically at identifying available resources for training and supporting staff working with students with Autism Spectrum Disorder. In conjunction with Autism Tasmania, a pilot workshop was subsequently delivered to key academic staff at the University of Tasmania.

**Dr Lyndsay Quarmby**

Dr Lyndsay Quarmby is a Lecturer in Rural Allied Health at the University of Tasmania with a focus on research, student placement experience, professional development of health professionals and innovative approaches to service development and delivery in rural and

remote areas of Tasmania. In addition to this position Lyndsay is an endorsed Clinical Psychologist and currently manages a Non-Government Diagnostic and Support Service team. Lyndsay has worked within the disability sector for over seven years and specialises in Autism Spectrum Disorder diagnosis and intervention.

**Professor Andrew Cashin**

Professor Andrew Cashin is Professor of Nursing at Southern Cross University (SCU). Andrew is an Honorary Professor at the University of Sydney, Adjunct Professor at the University of Technology Sydney and Visiting Professor at the Gold Coast Local Health District. Andrew conducts a clinic

as a mental health nurse practitioner for people with Autism Spectrum Disorder and their families at the SCU Health Clinic.

**Dr Nadine Zacharias**

Dr Nadine Zacharias is an equity practitioner with research expertise in the fields of equity policy and program management, inclusive teaching and learning in higher education and gender equity in employment. In 2016, she is an inaugural Equity Fellow sponsored by

the National Centre for Student Equity in Higher Education to undertake a strategic student equity research project of national significance. In her substantive position, she is Director, Equity and Diversity at Deakin University which covers the interrelated portfolios of access and equity partnerships, equity and diversity programs and access and inclusion to support students with disability in participating equitably in higher education.

**Ms Mary Kelly**

Ms Mary Kelly has been Equity Director at the Queensland University of Technology since 1997, with a portfolio covering both staff and student equity. Prior to working in higher education, she spent 20 years in the schooling sector, with professional and industrial roles at both state and

national level. She has responsibility for the Higher Education Participation Program (HEPP) at QUT, and has been Chair of the Queensland eight-university Widening Participation Consortium since its inception in July 2009. Mary has an interest in ensuring practitioner knowledge is used to influence public policy.

Biographies



Ms Annette Cairnduff

Ms Annette Cairnduff has more than 25 years working and leading community engagement programs with an education and social justice focus. As the Director Social Inclusion at The University of Sydney, she has led the development and implementation of the university's social inclusion strategy. Annette established and now leads Compass which has had more than 100,000 engagements with students, parents and teachers since 2009, and has taken a lead role in the establishment and implementation of the Bridges to Higher Education initiative. Annette has authored book chapters, journal articles and conference papers on the topics of effective and sustainable engagement with schools and communities, inclusive universities and teaching practice, and uprising a community development framework in a disadvantaged school setting.



Professor Brenda Cherednichenko

Professor Brenda Cherednichenko is Executive Dean Arts and Education at Deakin University. Brenda's research has focused on educational equity and community-university partnerships for improved educational opportunity and socially just outcomes. She has led research and development partnerships with communities and schools in Victoria and Western Australia, including Indigenous Australian leaders and communities, to enhance educational and social experiences for young people. Brenda was Chair of the ERA 2015 Review Evaluation Committee for Education and Human Society, is immediate past President of the Australian Council of Deans of Education (2012-2014), a Fulbright Senior Scholar (2009), and a Director of the Origin Foundation Board.



Dr Juliana Ryan

Dr Juliana Ryan's roles as an equity practitioner and educational researcher reflect a keen interest in the relationship between policy and practice, as lived and worked. In her role with Equity and Diversity at Deakin University she is responsible for managing student and staff equity programs. Her applied higher education research has spanned professional learning, inclusive learning and teaching, and work-integrated learning. Her research interests include social justice in education, identity in practice, narrative research and discourse analysis.



Dr Kelly George

Dr Kelly George is the Student Equity Reporting Coordinator in Deakin University's Strategic Intelligence and Planning Unit. She has been at Deakin since 2012 and has extensive experience working on a range of higher education data analysis projects focused on improving the access and achievement levels of students who are under-represented in higher education. Kelly's current area of research is in evaluating alternate admissions pathways to higher education for students from disadvantaged backgrounds.



Ms Smitha Mandre-Jackson

Ms Smitha Mandre-Jackson has worked in the Equity Services Department since 2009 and has 17 years of higher education experience. Smitha's areas of responsibility include equity scholarships, gender equity, compliance, data analysis and reporting. Smitha has undergraduate qualifications in journalism, english literature and psychology and a Master of Education (Career Guidance major).



Ms Linda Gasparini

Ms Linda Gasparini commenced at Deakin University in 2008. She currently works in the Equity and Diversity Unit as Strategic Equity Project Officer. Linda is responsible for the development, implementation and evaluation of equity projects, focussing on increasing the number of people from a disadvantaged background to access, participate and succeed in higher education. Prior to this role, from 2008 to 2015 Linda was Manager of Fees, Scholarships and Financial Assistance at the university, focussing on student equity through financial assistance and ensuring sound decision making for all students in regards to fee arrangements.

**Mr Danny Sun**

Mr Danny Sun is the Head of Scholarships at the University of Sydney, holding senior roles and having extensive experience in higher education administration. Danny is a qualified accountant and his expertise includes financial management, risk management and compliance in research grants, and end-to-end management, including development, promotion, selection, and compliance in scholarships, bursaries, and student loans offering to students in various cohorts and backgrounds.

**Professor Gail Whiteford**

Professor Gail Whiteford has an extensive background and experience in higher education having worked in Australian, New Zealand and for Canadian and US universities as well as with the Karolinska Institute in Sweden and the University of Capetown, South Africa. She has been a Head of Department, Research Centre Director, Head of Campus and, most recently, Pro Vice-Chancellor (Social Inclusion) at Macquarie University. In her home discipline of occupational therapy, Gail is widely published and has been an invited speaker and facilitator in numerous countries - including on two European Commission funded programs - and was honoured by the Canadian Association of Occupational Therapists for her international contribution. Currently Gail is an Adjunct Professor at the University of Canberra and is Principal of Whiteford Consulting, specialising in evaluative research, equity and diversity, leadership and program development.

**Dr Mike Kent**

Dr Mike Kent is Head of Department and a Senior lecturer in the Department of Internet Studies at Curtin University. Dr Kent's main research interests focus on the two main areas of tertiary and online education, as well as people with disabilities and their access to communications technology. He is co-author, with Katie Ellis, of *Disability and New Media* (Routledge 2011), and co-editor with Tama Leaver of *An Education in Facebook? Higher Education and the World's Largest Social Network* (Routledge, 2014) and with Katie Ellis of *Disability and Social Media: Global Perspectives* (Ashgate 2016).

**Dr Cathy Stone**

Dr Cathy Stone is currently an Equity Fellow with the National Centre for Student Equity in Higher Education, Curtin University, and is employed by The University of Newcastle Australia. Cathy has had many years' experience in developing and managing programs and strategies to improve student success and retention for both on-campus and online students in the Australian higher education sector. Much of Cathy's research focuses on the experiences of mature-age and first-in-family students, in which she has a number of publications. As a result of her previous work with Open Universities Australia, Cathy has a particular interest in improving outcomes for online students, amongst whom there is such diversity of experience and background.

About the Centre

Closing the gap between equity policy, research and practice

The National Centre for Student Equity in Higher Education began operation in 2008, hosted by the University of South Australia. In May 2013, Curtin University won the bid to take over the Centre and received funding to achieve its aim of informing public policy design and implementation and institutional practice, to improve higher education participation and success for marginalised and disadvantaged people.

The NCSEHE's objectives are:

- to be at the centre of public policy dialogue about equity in higher education
- to 'close the gap' between equity policy, research and practice by
 - > supporting and informing evaluation of current equity practice, with a particular focus on identifying good practice
 - > identifying innovative approaches to equity through existing research and the development of a forward research program to fill gaps in knowledge
 - > translating these learnings into practical advice for decision-makers and practitioners alike.

Student Equity and Participation

The NCSEHE's key purpose is "to inform public policy design and implementation, and institutional practice, to improve higher education participation and success for marginalised and disadvantaged people."

In keeping with its purpose, the NCSEHE is connecting Commonwealth student equity policy with the activities of higher education institutions and national equity outcomes, through its input into comparative assessment of institutional strategies, systemic assessments of policy achievements and assessments of national policy-making in view of this evidence.

The Centre's focus is based on three programs of research activity:

1. Equity Policy and Program Evaluation

The Centre is providing leadership and support in developing a national approach and resources to evaluate the impact of initiatives to increase participation of people from low SES backgrounds and other equity groups in higher education.

2. Equity Policy and Planning Research

The Centre is furthering equity policy and planning in Australia, sharing knowledge and capabilities developed in Australia, and providing evidence on the impact of policy on equity outcomes in the system. By enabling national research and engagement on higher education policy and practice, the Centre ensures its research includes analysis of all student equity groups, including people from low SES, Indigenous, remote and rural communities, and people with disability.

3. Student Equity Data

The Centre conducts analysis of higher education datasets from a student equity perspective. This encompasses:

- compiling and analysing national equity data and survey data on student transition to higher education
- managing a website that presents data on student equity performance in higher education; in particular, the mapping of higher education participation data in Australia
- providing access to sources for data and data-driven research on equity policy and programs from around Australia and the world.

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