

environment in which they are operating. Therefore, adult educators should not 'stay safe behind a matrix of competency standards' but rather question the outputs of their work and how best they can adapt a theoretical base to suit the needs of individuals and organisations. Sustainable leadership development requires a multi-tiered approach that can bear the scrutiny of robust research.

Finally, the practice papers focus on adult learning in two diverse international contexts – China and Nigeria. **Xiao Chen and Gareth Davey** explain the emergence and development of continuing education in China, its characteristics and its limitations. It is a relatively recent phenomenon in that country, becoming available in the 1980s for training specialist technicians, though now widening its ambit to include government officials, public service leaders, teachers and the general public. It is becoming very popular because of the rapidly developing economy and its need for a skilled workforce. But difficulties remain that need to be addressed, and the paper offers six recommendations to promote further development. **Omobola Adelore and Henry Majaro-Majesty** examine peace building projects and programs in Nigeria where the diversity inherent in multi-ethnic communities leads too readily to conflict and violence. The high illiteracy level is identified as one major factor. Accordingly, the authors develop a functional literacy model for peace building in which the role of the facilitator is critically important. They offer their model as a means of (a) promoting peace, (b) developing literacy skills and (c) building capacity 'to use socio-cultural and political structures to pursue human rights, fight inequality, prosecute injustice and demand development infrastructure'.

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## **Travelling against the current: an examination of upstream and downstream educational interventions across the life span**

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*Current social and economic circumstances are presenting universities with a more diverse general student intake whose support needs are increasingly similar to those of traditionally defined equity groups. This paper examines a Murdoch University equity program to demonstrate that simply increasing access does not always translate into increased benefit. It presents an argument for the restructuring of existing equity enabling programs and increasing transitional support for all students to achieve more substantive equality in student outcomes.*

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### **A fair chance for all: policy implications**

Australia has not always had the rates of entry to tertiary education currently experienced. In 1939, the total number of students at

Australian higher education institutions was 14,000 (Commonwealth of Australia 1996: 9). By 2003, there were 719,555 domestic students enrolled in Australian universities (Commonwealth of Australia 2004: 11). This increase was most pronounced during the 1990s when a combination of population increase, community expectations and government policy review all contributed to increased student enrolments. The movement from elite to mass participation in tertiary study also brought about greater diversity in the student population. However, the under-representation of certain population groups suggested that more would have to be done to increase equality of opportunity.

The *Higher education report for the 2004 to 2006 triennium* 'made a commitment to the development of a long-term strategy that would make equity objectives a central concern of higher education management, planning and review' (Commonwealth of Australia 2004: 11).

Following this, The National Board of Employment, Education and Training and The Higher Education Council jointly prepared a discussion paper on the issues to:

- define the overall national equity objective for higher education
- set national objectives and targets for each of the groups identified as disadvantaged gaining access to higher education
- present a range of strategies for each disadvantaged group to assist institutions in planning
- set out the responsibilities of both Government and institutions in achieving national equity standards (Commonwealth of Australia 2004: 11).

This established a framework for the Higher Education Policy to address the under-representation of certain groups in higher education. In 1990 the policy and action plan set out to define particular groups which were under-represented. These were:

- women (later re-defined as women in non-traditional fields of study)
- Aboriginal and Torres Strait Islander people
- people from low socio-economic status backgrounds (SES)
- people with disabilities
- people from rural and isolated areas
- people from non-English speaking backgrounds (NESB) who had been in Australia less than 10 years and spoke a language other than English at home.

From the time of the release of the 1990 policy, these groups have remained the focus of universities' equity access and support programs, although most institutions have identified and prioritised specific target groups from within the original list of six.

During the past 20 years, the principal approach taken to redressing under-representation of these particular equity groups has been through the introduction of special access and support programs. Some programs target a particular equity group, others have a more general equity focus. These special programs work to improve the rates of access and support for people from the identified equity groups. The rationale underpinning this approach is that 'by providing practical access and support schemes [this will lead to] a more balanced student profile and the benefits of higher education [will] flow to a more widely diverse group of individuals and to society' (Commonwealth of Australia 1996: 10).

Equality at the time of the introduction of this national approach in 1990 was seen as equal treatment of all people, regardless of circumstances. The expectation was that provision of equal opportunity through equity bridging/enabling programs would ensure similar outcomes for all students. 'Sameness' of treatment was equated with 'fairness' of treatment. However, equality in these terms 'does not take into account the accumulated disadvantage of generations of discrimination or the disadvantage faced by groups by

a system that fails to recognise different needs' (Western Australian Department of Premier and Cabinet n.d.: 6).

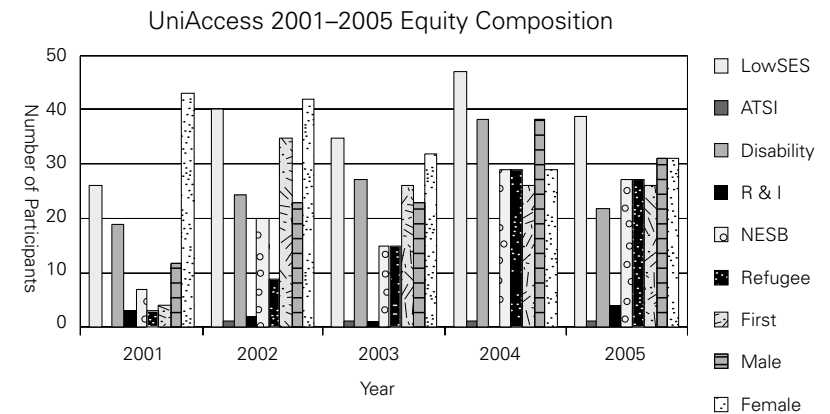
Substantive Equality [by contrast] involves equitable outcomes as well as equal opportunity. It takes into account the effects of past discrimination. It recognises that rights, entitlements, opportunities and access are not equally distributed throughout society. Substantive equality recognises that equal or the same application of rules to unequal groups can have unequal results... hence it is necessary to treat people differently because people have different needs (Western Australian Department of Premier and Cabinet n.d.: 6).

Equity and social justice form one of four defining themes to which Murdoch University is committed. Thus the institution has from 1990 given high priority to developing key strategies to address access and support for people from the equity groups. One of those strategies is the provision for a variety of entry pathways to university study, particularly for those people from the defined equity groups. In 1990, the University established the first of its alternative entry programs, UniQuest, a one-week, full-time, on-campus 'taster' and assessment course for people from one or more of the above categories.

By 1997, the University decided that it required an additional and more extensive program to 'bridge' people from the equity groups into undergraduate study. This program, entitled UniAccess, was a four-week, full-time enabling course which provided English as Second Language classes and broader exposure to the campus learning environment. From inception, participants were predominantly females (70 per cent), sole parents or other low-income pension holders with incomplete high school education.

In the last two years, however, UniAccess has attracted a progressively more diverse group of equity students (see Figure 1 below). This is characterised by a larger representation of people from Non-English Speaking Backgrounds (NESB) predominately those on Refugee or Humanitarian Visas, requiring English as Second Language support.

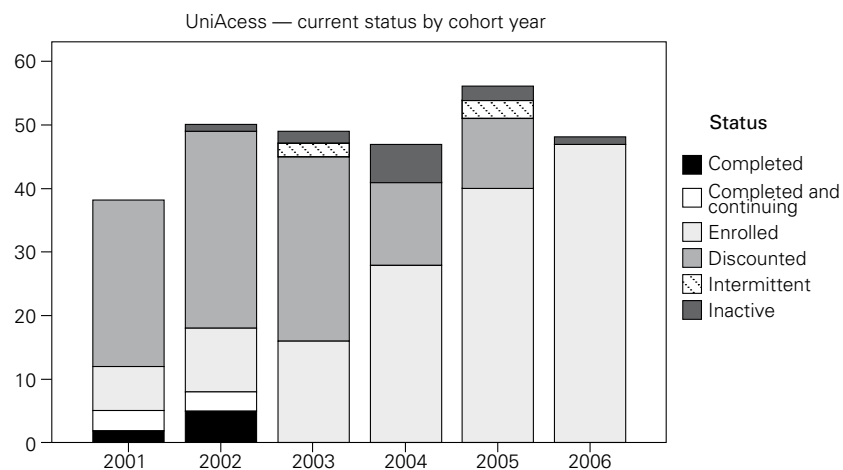
Figure 1: Composition of the UniAccess program (2001–2005)



Two other significant changes have also recently emerged in the makeup of the cohort accessing the UniAccess program. Firstly, an increasing number of participants (45 per cent in 2004) are likely to have completed a Year 12 or equivalent overseas level, though most have not studied tertiary entry subjects. This variation can be seen in both the Australian-born participants and those on Refugee or Humanitarian Visas.

The second recent demographic change occurring in the UniAccess program intake between 1997 and 2005 is the increased levelling of the male to female ratio. From its inception, there has been a 40:60 ratio in the UniAccess program. However, in the 2004 program, there were 57 per cent of males registered as participants and, in 2005, there was an equal gender distribution of 50 per cent. This move to a higher number of male participants in UniAccess is largely accounted for by the increasing intakes of Refugee and Humanitarian Visa holders, most of whom are male and from the Sudan. While there are strong humanitarian and equity considerations as to why these students should be granted opportunities for university study, their educational outcomes have been disappointingly poor (see Figure 2 below).

Figure 2: UniAccess entrants 2001–2006  
(enrolment/completion status as of March 2006)



In the cohort of students entering their first year of university study in 2002, 10 per cent of the population completed their undergraduate degree by 2006. However, 62 per cent of this cohort discontinued by 2006. In the 2003 cohort, no students have graduated and the percentage of students who have discontinued is 59.2 per cent.

Figure 3: UniAccess 2001–2006 (current status by cohort year)

	Status						Total
	Completed	Completed and continuing	Enrolled	Discontinued	Intermittent	Inactive	
2001 Count	2	3	7	26	0	0	38
% within cohort	5.3%	7.9%	18.4%	68.4%	0	0	100%
2002 Count	5	3	10	31	0	1	50
% within cohort	10.0%	6.0%	20.0%	62.0%	0	2.0%	100%
2003 Count	0	0	16	29	2	2	49
% within cohort	0	0	32.7%	59.2%	4.1%	4.1%	100%
2004 Count	0	0	28	13	0	6	47
% within cohort	0	0	59.6%	27.7%	0	12.8%	100%
2005 Count	0	0	40	11	3	2	56
% within cohort	0	0	71.4%	19.6%	5.4%	3.6%	100%
2006 Count	0	0	47	0	0	1	48
% within cohort	0	0	97.9%	0	0	2.1%	100%

In the 2005 cohort, the percentage of students who has discontinued is 19.6 per cent. This is comparable to the national attrition rate of commencing undergraduate students estimated to be 22 per cent (DEST 2000). However, if we track these students over a three-year period of time, the completion and continuing rates of these undergraduate students is far less satisfactory than the mainstream cohort. The (former) Department of Education, Science and

Training (2001) calculated that the completion rate for the 1993 cohort of undergraduate students new to higher education was 62.2 per cent, which, compared with the UniAccess completion rate for students commencing their undergraduate studies in 2002, was 10 per cent.

The question then is why this should be the case, given the level of investment and support currently provided to these students from equity backgrounds.

### **Educational investment for substantive equality**

James Heckman, the 2000 Nobel Laureate in Economics, has recently presented evidence which challenges current policy thinking in the USA, Australia and other developed nations regarding the cost-efficiency of the range of public sector investments now made to overcome educational disadvantage. This evidence is based on USA national longitudinal data and suggests that the resources available to young people in their years of university attendance play only a small role in explaining the socio-economic and ethnic differentials in observed rates of university enrolment and successful completion. The relevance of Heckman's arguments to the Australian context is in showing what economic efficiency analysis adds to the traditional arguments for investment in the educational opportunities and skill development of disadvantaged groups. Until very recently, these have mostly been made on the grounds of fairness and social justice.

For example, the tertiary educational reforms initiated in this country to provide '*A fair chance for all*' (DEST 1990) were based on the argument that providing access to tertiary education would enable students to enjoy equal opportunities. However, increasing access has not always translated into increasing opportunity to participate or benefit. The value of Heckman's thesis is in how it widens the frame of reference for considering current Australian trends in

higher education enrolments, and the participation and outcomes of students in mainstream and equity programs.

According to the 2006 report of the Council of Australian Governments (COAG), Australia now has a much lower proportion of adults in the workforce with a base qualification equivalent to Year 12 than most other Organisation for Economic Co-operation and Development (OECD) countries. This report cites recent Australian evidence showing increased educational attainment is the principal determinant of people's economic prospects and life chances in terms of their participation and productivity (Access Economics, cited in COAG 2005). Studies of earnings in economically advanced countries, including Australia, show the cumulative benefits of successive years of education. Typically, each extra year of education raises personal earnings by five to ten percent (Dorwick 2003).

Governments are now realising that workers with higher skills also contribute to productivity indirectly by facilitating the introduction of new products, services, processes and technologies. Higher skills contribute not only to productivity levels but also to productivity growth rates. Learning begets learning for nations, as well as individuals. The Access Economics report, cited by COAG, suggests that an additional year of average schooling increases annual productivity growth rates by between 0.3 per cent and 0.8 per cent (COAG 2006).

The problem thus facing modern developed economies such as the USA, the United Kingdom and Australia is that the supply of skilled workers is simply not keeping pace with demand. The dilemma for educational policy and practice is how to increase this supply in an economically efficient way. The rising costs of tertiary education have seen much of the recent policy discussion focusing on the gaps in schooling attainment by family income as a major causal factor in the poor participation and achievement of disadvantaged students.

Second chance remediation programs, such as a publicly-funded TAFE job training or alternate access entry programs to university study, have been seen as another relatively low-cost and effective strategy to overcome early disadvantage. Social transfers (such as Austudy) which provide economic support to facilitate the educational participation of cash-constrained individuals are another. However, despite the apparent intrinsic worth of these programs, Heckman's analysis suggests that these measures are unlikely to have much effect in reducing disparities in educational outcomes at the population level unless more fundamental reforms are also made in incentives to education earlier in the life cycle.

The review by Carneiro and Heckman (2003) of the USA's longitudinal data suggests that favourable educational outcomes in children and adults are critically dependent on settings and resources that foster intellectual, social and emotional development long before students enter university. They conclude that the longer-term factors such as parental environments and family income available to children over their entire life-cycle are far more decisive in promoting university readiness and social attachment than family income in the adolescent years. 'Better family resources in a child's formative years are associated with higher quality of education and better environments that foster cognitive and non-cognitive skills' (Carneiro & Heckman, 2003: 11). This analysis concludes that there is a 'high return from early interventions and a low return to remedial or compensatory interventions later in the life cycle' (Carneiro & Heckman, 2003: 1). Furthermore, their evidence regarding the return on early public investment in disadvantaged children in terms of earning gains show that these may be as high as 15–17 per cent per dollar invested. The magnitude of these gains is such that they suggest that it is possible to avoid the *equity-efficiency* trade-off that plagues so many policies – for example, tax policy or welfare policy.

Heckman's evidence has clearly been understood by Australian governments if the emphasis in the 2006 COAG report on strategies

for investment in human capital formation is anything to go by. This new direction in Australian educational policy, as articulated in the 2006 COAG report, is underpinned by recent scientific evidence of the role of 'experience based' brain development in early life and the extent to which this is predictive of children's trajectories of development in health, education and socialisation. One of the world's leading researchers into this aspect of human development is Professor Fraser Mustard from the Canadian Institute for Advanced Research.

In a 2006 report commissioned by the World Bank, he states:

To achieve equity in competence, coping skills and health will require applications of the new understanding of how the early years of child development, particularly brain development, set trajectories that affect health (physical and mental) learning and behaviour throughout the life cycle (Mustard 2006: 2).

If we extrapolate these insights to the tertiary education sector, what do they suggest for the way in which equity and alternative access programs currently operate? The convergent educational, neuro-developmental and economic findings cited by human development theorists such as Mustard and Heckman suggest that, in their present form, these enabling programs do not really offer equal opportunity, nor are they likely to ensure more equitable outcomes. Most, but not all, students who come from low socio-economic backgrounds, from Aboriginal and Torres Strait backgrounds, from non-English speaking backgrounds, from remote and rural areas or students with disabilities, have generally less capacity to succeed in the university environment because they are much more likely than other students to have had their learning competencies compromised by early childhood factors. Until such time that early childhood intervention programs are more widely implemented in this country, it is evident that universities must continue to address these issues by treating students differently because students have differing learning, social and economic needs.

In reviewing the outcome data for Murdoch University's equity programs over the past five years, it is clear that in a disappointing number of cases we have not been able to redress the cumulative disadvantage which these groups have experienced (see Figure 2 above). Given our understanding of the many factors which operate to enhance or weaken educational outcomes, what initiatives should we be undertaking in the university setting to promote more equitable results?

### **What can be learned from other countries?**

An examination of practices and policies in other settings is instructive in seeking to answer this question. Post-apartheid South Africa provides some useful pointers as to how students from disadvantaged backgrounds can succeed in the university context. In the new South Africa, universities have been confronted with the challenge of providing access to large numbers of students from poor scholastic and socio-economic backgrounds.

Most universities in South Africa offer two types of bridging program:

The first is where students are able to complete their first year in two years without incurring any funding penalty for the university [and] the second is a bridging program where students who do not qualify for university entrance on the grounds of their poor scholastic results, repeat Grade 12 (at a special institute called SCIMATHUS run by the university) in a program designated to close the gap between the level of competence of the student and the minimum requirements for university entrance (Page, Loots & Du Toit, 2005: 7).

Another intervention that has proved successful in the South African context has been the introduction of peer support programs to assist students who are educationally inadequately prepared for university studies. In the Medical Faculty of Stellenbosch University, top students in their second year of studies act as tutor mentors to first

year students, while third year students mentor second year students who are at risk of failing. The tutoring aspect of the mentoring scheme has been shown to be essential to the success of the program (Page, Loots & Du Toit 2005: 7).

A particularly promising approach, which has shown significant benefit to students in their first year of university study, is that developed in the USA by Tinto (2005). His work has demonstrated that students (particularly under-served students) benefit greatly from the availability of learning communities, which serve to build support across the curriculum and between academic staff and student support services. These learning communities feature a minimum of two units tied to each other by an overarching theme. For example, a theme might be 'The presentation of race in America'. The connected units would be a unit in Communications, a unit in Writing and one in US History. A team specialising in the different areas would teach students and, in this way, students' skills are developed and monitored by dedicated teaching staff. His work has shown that these communities provide the conditions for student success and a number of universities in the USA have re-organised programs so that learning communities are intrinsic to the first year experience.

Interventions such as this, while initially time-consuming and labour-intensive, have shown significant benefits to all students making the transition into university. Tinto has reported findings from a meta-analysis of several recent US studies comparing the transitional outcomes of students participating in first year college programs organised around learning communities with those of students in comparison programs. This showed the average first year pass-rate of students in learning communities was 76.6 per cent in contrast to 55.9 per cent in the comparison programs, and the average continuation rate was 57 per cent and 41 per cent respectively (Tinto 2005).

Given the greater diversity of need within the mainstream student population as well as the increased learning support needs of existing equity groups, universities must consider new ways in which enabling programs and transitional support for first year students can be more effectively delivered.

### **Initiatives at Murdoch University**

In 2004 Murdoch University created a new senior academic position designed to facilitate the development and improvement of all enabling programs (including equity programs), determine their efficacy and recommend policy initiatives to benefit students entering university through alternative access programs.

Prior to the creation of this position, a comparative analysis of the outcomes of all the enabling programs had not been undertaken. The UniAccess data presented in this paper broadly represent the rates of retention and attrition seen in the other enabling programs. Overall, the success and completion rates of these students are poor in comparison to students who enter university through mainstream avenues (principally, the Tertiary Entrance Examination in Western Australia).

Combining an overview of the data with a clearer understanding of students' academic needs has presented us with the opportunity to consider alternatives to the programs we offer students. In the short term, the changed demographic of the student population with an increasingly diverse cohort of students in the UniAccess program has demanded the introduction of a range of supports to encourage successful transition. These include additional one-on-one tutoring, and various other accommodations to ensure that students can successfully access academic materials and the learning environment. These current interventions, particularly as they relate to students whose first language is not English, are neither cost effective nor sustainable in the long term.

It is anticipated that expanding the current four-week UniAccess program to a semester program would allow students to develop academic skills more fully and acquire an understanding of the university culture. It would also enable students to gain a broader insight into courses and the requirements of specific disciplines. A recent study conducted by the University of Melbourne's Centre for the Study of Higher Education on behalf of the Department of Education, Science and Training found one third of students surveyed in 2004 felt ill-prepared to choose a university course (*Campus Review* 2006: 3). This is particularly the case for students from low socio-economic backgrounds, first generation students and non-English speaking background students as they generally have a poor understanding of course expectations and the career possibilities potentially available.

An expanded equity enabling program would also allow for the development of information and computer technology skills. This is essential as students who are located under an 'equity' banner also have commonalities with all students whom Anderson (2006: 2) calls 'the new millennium student, who is typically enrolled full-time, working up to 20 hours per week and spending less than five hours per week on campus other than for course requirements'. Once students have embarked on their undergraduate degree, their capacity to undertake supplementary skills courses is limited and at Murdoch University we have seen that failure to acquire these skills greatly affects a student's capacity to achieve in the first year. This can contribute to their decision to discontinue their studies before the completion of a full two semesters.

In October 2007, having taken into account the above-mentioned considerations, Murdoch University piloted a twelve-week enabling program called *OnTrack*. The program has replaced the existing non-indigenous enabling programs across all three campuses. *OnTrack* is divided into three modules, each of which is four weeks in duration.



Students are required to attend classes on campus for three days per week. A fourth day has been set aside for those students who require English language support.

*Module One: 'Footprints': engaging with university life, culture and discourses*

This is the foundational module for the program, which introduces students to the university, its culture and expectations and encourages students to begin developing the skills they will require for tertiary studies.

*Module Two: 'Sustainable Living': engaging with different knowledge communities and discourses*

This module encourages students to develop a clearer understanding of the specific disciplines and courses they will undertake in their undergraduate program, while at the same time further developing their academic competencies.

*Module Three: 'Sustainable Learning': engaging in specialist knowledges and further development of research skills*

This module provides students with opportunities to rehearse learned skills and apply them in practical and useful ways. Students at this stage of the program are required to undertake some research projects which are relevant to their intended course of study.

### **What we hope to achieve through an extended enabling program**

Students who come from educationally disadvantaged backgrounds need time to integrate and apply the knowledge they gather at university. We anticipate that this slower and scaffolded approach to learning in the university will enable students to enjoy the scholarship of discovery (about themselves and academic disciplines), to take pleasure in academic activities and develop skills in integrating knowledge across a range of diverse learning opportunities. More particularly, the *OnTrack* program is designed to achieve:

- enhanced acculturation of students to the university environment
- better retention of students and improved academic outcomes in their undergraduate courses
- improved understanding by students of courses, their academic demands and career opportunities
- effective mentoring systems co-ordinated by the First Year Experience Co-ordinator
- good connections between students and academics from their discipline
- more informed approaches to balancing academic studies, work and other responsibilities
- a better level of engagement with the program by academics, administrative staff and senior executive across the university.

Our expectation is that, once students have enjoyed a playful yet rigorously academic introduction to the university and the demands of its various disciplines, they will be resourced to pursue their undergraduate studies with sufficient confidence and application. The pedagogical and pastoral strategies deployed in this program may also be transferable and have application for many commencing undergraduates, not only equity students.

### **Conclusion**

In this paper we have demonstrated that the investment applied to increase access and skills development at tertiary level for people from educationally disadvantaged groups does not achieve equality of outcomes for these groups.

Governments need to take a longer-term view in redressing the needs of what appears to be a growing proportion of the population who are likely to be excluded from participation in tertiary education due to adverse circumstances of early child rearing and learning. While existing 'remediation' and access programs at the pre-tertiary and tertiary level can facilitate some limited individual successes, they

would appear to have little effect at the population level in creating substantive equality in outcomes.

Academic institutions must now find the means to cater for a much greater diversity in the support needs of individual students and those of distinct equity groups to ensure their social and academic engagement. Rather than expecting students to adapt to the culture's expectations, the institution should be looking at ways to best accommodate the diverse needs of students. A 'one size fits all' model is no longer appropriate or desirable. Substantive equality which promotes treating people differently to accommodate their differing needs must be integrated across the curriculum and built into pedagogical practices so that students at risk can perform better in higher education.

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**Dr Jenny Silburn**, in her current role as Senior Lecturer (Academic Transition) at Murdoch University, is responsible for the development of transition policies and effective strategies for embedding good pedagogical practices across the university, so as to provide substantive equality (access and successful outcomes) to students from wide-ranging backgrounds. She is in regular contact with students from diverse groups and has a good understanding of the issues and challenges they face. Her role also involves consulting with academic staff to ensure that they are informed about the issues which impact on students' capacity to succeed within the university.

She has researched the first year experience, particularly the learning experiences of non-traditional students. In 2005, she presented a report to the university entitled, Transition and the journey of the first year student. This has resulted in a number of initiatives being undertaken for the benefit of first year students, including the appointment of a first year coordinator. She has presented at national and international conferences on equity issues.

**Geraldine Box**, for the past 12 years, has been associated with programs which form an important part of Murdoch University's entry and support strategies for students from educationally disrupted and equity backgrounds. Most recently, she was involved with the team developing the University's new enabling program, OnTrack, which was introduced in October 2007.

Management of the Equity, Health and Counselling section of the University provides her with the opportunity to develop and improve access for equity students as well as supports to enhance continuation once they are enrolled. Geraldine's current interests are focused on social inclusion as it relates to higher education.

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