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INDIGENOUS HIGHER EDUCATION: the ROLE of UNIVERSITIES in RELEASING the POTENTIAL

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Abstract

The participation rate of Indigenous people in higher education is comparatively disparately low across all sectors. In this paper we examine the pivotal role of the university sector in addressing this inequity and releasing the potential for increased Indigenous enrolment, participation and completion in higher education. Indigenous higher education, we argue, is core university business, not an equity issue, and a unique opportunity currently exists for achieving significant progress. Using examples of best practice we show how universities can take positive practical steps to overcome the commonly identified barriers to Indigenous higher education success. We also propose four specific strategies for increasing Indigenous higher education success across all facets. We extend our analysis to the low Indigenous representation among university staff arguing that a greater presence and nurturing of Indigenous staff, academic and general is a vital facet of improving Indigenous higher education access and success. Finally, we argue that a longitudinal study of Indigenous higher education participation is needed to provide an evidence base to inform and increase the efficacy of policy in this area.

Introduction

The participation rates of Indigenous people in higher education is less than half those of the non-Indigenous population and apparent across all aspects of higher education: undergraduate; postgraduate and as staff. There is a yawning educational gap between Indigenous and non-Indigenous Australia. But the point here is not to re-establish this well-documented disparity. Rather we seek to demonstrate the enormous potential for increasing Indigenous success within our universities. The critical question is how to release that potential. More specifically, how do we transform Indigenous pathways from school to university, from undergraduate to postgraduate studies, and from university into the professional workforce, including academia, into an achievable reality? The role of our universities in all of these aspects is pivotal. More critically, we believe that there exists, at present, the unique combination of opportunities and options for realising significant improvement.

In this paper we examine how individual universities and the university sector overall can have an impact on increasing Indigenous higher education success. We begin this process by drawing together data on the identified barriers to Indigenous participation and advancing positive steps that universities can take to directly address these factors. The next two sections build on this base. First, using examples of current best practice to illustrate, we explore concrete ways to surmount barriers and release Indigenous potential in higher education institutions. Second, we argue that to increase Indigenous higher educational success, we need to scaffold the requisite Indigenous student support structures and processes into an integrated platform. The pathways approach must also include a bridge from higher education to employment.

Contextualising the field of Indigenous higher education

As Table 1 amply demonstrates, Indigenous students are heavily under-represented in all arenas of higher education. To achieve the parity of participation goal of the 1990 National Aboriginal (and Torres Strait Islander) Education Policy (AEP) Indigenous enrolments will need to more than double at the

Bachelors level, increase nearly four-fold at the Masters level and nearly triple at the Doctorate level.

For Indigenous students, participating in higher education is not simply a matter of deciding "yes" or "no" to university. While enrolment occurs at the individual level such choices are socially patterned. Our students who make it through to enrolment choices are the survivors of a long process of attrition that begins even before formal schooling. Research in this area, while usually only including Indigenous students as one of the cluster of "equity groups", broadly concludes that low tertiary participation rates are not primarily related to individual decisions (see NBEET, 1999; Western et al., 1998). Rather, the research stresses the overwhelming role of social, economic, political and cultural factors in shaping and facilitating the choices for students and their families. The National Board of Employment, Education and Training (NBEET, 1999) study, for example, finds that rurality and low socio-economic status combine to produce the greatest educational disadvantage. Reducing educational disadvantage and increasing the number of our young people with higher education participation as part of their worldview and life-plan is central to higher educational Indigenous success.

Indigenous specific data confirm that among those who make it to first base, the enrolment and completion barriers facing our students are formidable. Apart from the well-established factors of high levels of socio-economic disadvantage, rurality and limited family and individual exposure to the personal and broader benefits of higher education (see Biddle et al., 2004; DEST, 2005; Encel, 2000), Indigenous students face other obstacles, both within and without the higher education environment. These include: lack of physical access to educational institutions; individual and cultural isolation and alienation; dissatisfaction with courses of study and educational delivery modes; inflexibility of higher education systems; unfamiliarity with and lack of confidence in academic requirements and skills; lack of access to educational resources; lack of family support; high rates of household crowding and family and personal disruptions; participation linked financial problems; the personal, family and financial burdens of spatial relocation; and the pull of community and family commitments (Biddle et al., 2004; Bin-Sallik, 2000; Bourke et al., 1996; Bunda & McConville, 2002; Morgan, 2001; White, 2000). Appropriately and comprehensively supporting our students within higher education is also a vital plank to releasing Indigenous potential.

Yet, while the barriers to Indigenous participation in higher education are daunting and multi-faceted, they are not insurmountable. The positive and vital role of Indigenous centres and units in assisting and supporting Indigenous students in their studies is well-established (Bourke et al., 1996; Morgan, 2001). The present environment of a strong public policy and political commitment to directly addressing barriers to Indigenous higher education participation coupled with a similar level of commitment from the university sector presents a unique opportunity for achieving significant progress. Current examples of successful practice clearly demonstrate the potential of innovative programs combined with integrated support structures to positively impact on Indigenous participation and success in higher education. Such support structures, however, must be grounded in an evidence base of what works, and be aligned with the needs, requirements and aspirations of Indigenous students and community to access the facilities, opportunities and promise of higher education.

Table 1: Indigenous/non-Indigenous student enrolments and completion 2005 (adapted from DEST, 2007a; IHEAC, 2006).

	Bachelors Degree (2003 figures)	Masters (2003 figures)	Masters (Research) (2005 figures)	PhD (2005 figures)
Enrolments				
Indigenous	5364	504	119	220
Non-Indigenous	498526	78798	7803	32760
% Indigenous	1.07	0.64	1.50	0.67
Parity Number	11546	1891	175	775
% Increase Needed For Parity	215%	375%	147%	352%
Completions				
Indigenous	698	120	13	16
Non-Indigenous	95606	19590	1247	4372
% Indigenous	0.73	0.61	1.03	0.36
Parity Number	2205	470	29	102
% Increase Needed For Parity	316%	391%	223%	637%

Can universities assist in realising Indigenous potential?

Universities have a vital role in realising Indigenous higher educational potential. Citing the possibilities of higher education as "the spark to ignite genuine indigenous control of destinies", Lane (1998) argues that universities are critical in assisting Indigenous students' access the knowledge bases they need. Despite this centrality of universities, a search of university websites for information relating to programs for Aboriginal or Torres Strait Islander people reveals that the take-up of this role is, at present, patchy at best. While all 26 Australian universities state that they provide a range of students support services and other functions for their student bodies, 15 make no specific mention of Aboriginal and Torres Strait Islander students and only 11 universities report that they provide bridging, preparatory or foundation programs for Indigenous students. The point here is that Indigenous student success cannot occur without a concerted and a co-ordinated approach by the Australian university sector. If we are to redress current inequities universities need to take a leadership role in enhancing Indigenous higher education pathways and to adopt active and specific strategies for engaging Indigenous students and enhancing participation and successful completion.

How successful have we been to date?

Although the current situation remains highly inequitable, the past 15 years have witnessed significant growth in Indigenous higher education participation. This success, albeit limited, is a direct consequence of the implementation of relevant and effective support mechanisms for Indigenous students who are usually without an adequate secondary education. Proof of this potential for direct university intervention can be found in the spectacular effects from successful support mechanisms and courses that have been introduced during the last 20 years. Examples with national profiles of success include the law programs at the University of New South Wales and Flinders University where Indigenous specific pre-law courses provide the skills and encouragement to enrol in Law; the Medicine programs at the University of Newcastle, University of Queensland and the University of Western Australia which have targeted places for Aboriginal and Torres Strait Islander students along with academic, social and cultural support; Health initiatives at the University of Western Sydney and Deakin University and Indigenous centred higher level support programs such as the Academy of the Social Sciences in Australia sponsored Indigenous postgraduate summer schools at the University of Melbourne. The key to the success and sustainability of such programs seems to lie, firstly, in their responsive to students and, secondly, being Indigenous led.

What these programs also demonstrate is that specific, tailored programs are at the base the success of such initiatives. A leading example in this area is the University of South Australia's Aboriginal and Islander Support Unit (AISU). The practical outcomes of their work are evidenced by the first time Indigenous graduates in Industrial Design, Medical Radiations and Administrative Management as well as Masters Graduates in Psychology and Theology. The University of South Australia continues to produce graduates in new fields each year. The successful Indigenous student support strategies of the AISU are built around the development of close working relations between specialist AISU and faculty staff. These strategies are, in turn, supported by a clear acceptance and understanding of the level of responsibility held by all faculties for the success of Aboriginal and Islander students. The lesson here is that, to achieve higher rates of Indigenous graduation, the whole of the university needs to be committed, both practically and philosophically, to that task. And graduates are what we need. The more graduates we have, the more they can contribute to Aboriginal communities and organisations and to Australian society generally. Graduates are our most powerful potential force for combating our social, political and economic inequality. For Indigenous people in particular higher education results in both a private return for the individual and a social return for the whole community (Junankar & Lui, 1995).

Further practical examples of how to successfully raise the number and proportion of Indigenous graduates is gleaned from our experiences at the University of Tasmania. At present the Tasmanian Indigenous retention and completion rates to Year 10 and retention to Year 12 are the best nationally and growing. Better outcomes for our younger students are supplemented by the provision of support mechanisms to address literacy and numeracy for Aboriginal adults through well established programs in the TAFE and Adult Education sector. Also, the Murina program at UTAS provides a real transition to university study, is flexible and allows us to respond to individual interests and needs while at the same time giving students real insight to the expectations of university life. In combination, these factors, along with the support services provided by the Riawunna Centre, all contribute to the high retention and success of Aboriginal graduates at UTAS. The Tasmanian case highlights the fact that success in realising Indigenous higher potential involves many players. Success is grounded in intra and inter university collaboration and the careful scaffolding of different support, skills development and aspiration building components.

Learning how to do it better

The universities, their Indigenous support centres and their Indigenous communities also need to form

wider partnerships. Closer working relationships between Aboriginal university staff and Aboriginal staff in schools, colleges and TAFE systems will improve pathways to higher education for Indigenous students. New ways are needed to reinvigorate bridging programs and to improve the transition from secondary school to higher education. Indigenous centres can take a leading role in this process. For example, Wilto Yerlo (University of Adelaide) and Yunggorendi (Flinders University) Centres are key players in creating pathways to tertiary education for secondary students. Each centre makes strong use of tutoring and mentoring to enhance tertiary entrance and supporting Indigenous students throughout their studies. Imagination and a willingness to move away from traditional higher education approaches are needed to fully address the learning needs of Indigenous students. La Trobe University in Victoria, for example, has innovatively developed a block teaching program for Indigenous students in Central Australia to help them achieve university qualifications.

The following comment from Dr Larissa Behrendt, (Deadly Vibe, 2004, para. 1) from the Jumbunna Indigenous House of Learning at the University of Technology Sydney challenges all Australian universities to commit to achieving similar gains for Indigenous Australians over the next five years when she says:

> Twelve years ago, we had two Indigenous students at this university. Now we have 360. It really heartens me to see the number of Indigenous people in tertiary education. When you look at them, you can see a real generation shift. People are now realising their potential, and seeing that opportunities are open to them.

The recipe and ingredients for success

So what are the ingredients in the recipe for successful university engagement with Indigenous higher education? At the base of any strategy is the understanding that Indigenous higher education is core university business and not just the responsibility of the Indigenous centres. Moving on from this underpinning premise, based on our own experience and those of other Indigenous scholars and educators, we recommend the following as four fundamental ingredients for increasing the higher educational participation and success of our students.

The first ingredient is the recruitment of highly dedicated staff. From entry through to graduation and then onto postgraduate study Indigenous student success is dependent on staff able to recruit, induct, support and strengthen Indigenous students in their journey through higher education. Critically, these staff must be placed and operate throughout the university not just in Indigenous centres (Lane, 1998). In turn, universities must value and recognise the critical role of these staff. Inducting and supporting Indigenous students is a rewarding but time-intensive and sometimes exhausting task. Yet, too often, in our current university settings, such work is either disregarded or undervalued. Even when recognised it tends to be regarded as a volunteered "extra", rather than a part of core workload for the staff member and core business for the university. These staff members require institutional support to maximise their effectiveness and to develop their own skills and capacities. Being engaged in Indigenous support roles must not be a career dead-end with little opportunity for career advancement or capacity to work across other areas and disciplines within the university sector. In particular, developmental training in research, curriculum development, teaching in the university system is needed to maximise their ability to support and recruit Indigenous students.

The second key ingredient is to optimise the degree of comfort, cultural and academic, of beginning students. The first semester and the first year are critical times for Indigenous students (see Attinasi, 1989). To maximise our students' chances of academic success we need to integrate the key aspects of student life and achievement into an accessible form (see Tinto,1997 on student persistence; and Eimers & Pike, 1997 on adjustment to higher education life). Higher education provides a platform for more than academic achievement for Indigenous students. Students should emerge from higher education with a stronger sense of their human worth, their specific identity along with their ability to achieve. As Lane (1998) argues we need to build on dialogue with students, listen to their voices and build the lessons learnt into the preparation and support mechanisms.

To help our students survive the initial months with confidence and enthusiasm, vital early support needs to be provided interpersonally and practically. A supportive orientation to university study, both generally and to particular disciplines, the organisation of social activities to help students develop networks with staff and other students are important components in early support. On a one-to-one level advocacy, assistance and referral in relation to areas that we know many of our students strike difficulties such as enrolment processes, Abstudy application, housing and accommodation, finances and scholarship access also need to be available. Practical mechanisms are also needed to provide easy access for our students to basic tools of academic activity. These include the provision of meeting and study areas, library resources and equipment such as computers and photocopiers, as well as kitchen facilities, newsletters and noticeboards to let students know what's going on.

Third, the role and centrality of Indigenous centres in Indigenous higher education needs to be recognised and strengthened. While we want our students to feel at home in all disciplines and all locations across

university campuses, the presence of a dedicated, welcoming and highly visible Indigenous centre is central to Indigenous students' persistence and educational survival. The positioning of the Indigenous centre both on the campus and within the university hierarchy also speak much louder to Indigenous students and community of the value the university places on Indigenous education than do any mission statements or memorandum of understanding. The existence of many Indigenous centres, however, is a perilous one and often overburdened with sometimes conflicting expectations from the university and Indigenous students and their communities. Strong institutional backing from the university, senior management strategic involvement and a secure funding base are all prerequisites for strong and vibrant Indigenous centres. The university also needs to be very clear and very realistic about what they expect from their Indigenous centres.

The final ingredient for increasing Indigenous higher education success is to keep the institutions' Indigenous support mechanisms constantly under review. This means regular and ongoing evaluation and invigoration of the formal as well as the informal support mechanisms provided by Indigenous centres and those from within the wider university. Support mechanisms need to stay responsive to current students' needs and aspirations and be flexible enough to be able to adapt to changing student circumstances. A core means for such re-invigoration is the cross-fertilisation of ideas and learnings between Indigenous centre staff, staff from other areas of the university, and cross-institutionally.

Realising the potential in employment

Of course, while a degree is a major step along a pathway it is not the goal itself. The real goal of Indigenous graduates, as for all graduates, is career-based employment. Strongly supported pathways for students and graduates from higher education to career-based employment enhance the attractiveness of higher education for both our youth and mature age students.

What little we know about the employment destinations of our graduates is drawn from knowledge compiled by Indigenous education centres and produced by the Indigenous Education Strategic Plans (see Encel, 2000). These data confirm that Indigenous graduates are far more likely to enter government employment (Federal, State and local) than university or private sector employment. In particular, Indigenous workers appear to be heavily under-represented in professional private sector positions (Taylor & Hunter, 1997; Taylor & Lui, 1996). Googling the term "Indigenous graduate employment" reveals at least one reason for this track to the public service. Many government departments have well-developed Indigenous employment strategies, backed up by Indigenous specific cadetships that provide students with a living allowance above current Abstudy rates along with other benefits such as HECS payments, uniform and equipment allowance and travel and accommodation allowances, whilst also providing work experience opportunity during the course of study.

The linkage systems between these programs and universities (and hence our graduates), however, are haphazard. This is especially problematic because not only is this the first generation of Indigenous students to take up higher education in any numbers it is also the first generation to contemplate professional employment. As such, our students and their families frequently lack the worldviews, understandings of processes and capacity to access information about these options without consistently targeted support and guidance. Universities Career Services and Indigenous centres must work together to improve the access of Indigenous students to graduate employment

Table 2: Indigenous and non-Indigenous academic staff 2006. Figures represent numbers of staff in each function, not full-time equivalent staff (adapted from DEST, 2007a, 2007b; IHEAC, 2006).

Academic Staff	Number	Percent Indigenous (%)	Parity Number	Percent Increase Needed for Parity (%)
Indigenous				
Research only	36	0.28	296	821
Teaching and research	217	0.77	648	299
Teaching only	25	1.79	32	128
Indigenous (total	278	0.65	984	354
Non-Indigenous				
Research only	12908			
Teaching and research	28063			
Teaching only	1397			
Non-Indigenous total	42368			
% Indigenous Total	**0.65**		**2.3**	

opportunities. Additionally, a national conversation is yet to be had with regard to the best possible conditions for a cadetship and the match between cadetship availability and Indigenous graduate student professional employment location. Links with the private sector to enhance Indigenous educational support and graduate employment outcomes are even less developed.

Indigenous employment within universities: Underpinning disparities

Universities are often major employers within their regions, yet their record of employing Indigenous staff is poor. Nationally, less than one per cent of university staff, either academic or general, are Indigenous. As shown in Table 2, current numbers of academic staff will need to increase four-fold to achieve representative parity. These disparities are even larger when the dispersion of Indigenous academic staff is examined by function. An eight-fold increase in the number of Indigenous research only staff is required before parity is achieved in this area (IHEAC, 2006).

The general nature of these figures conceals the limited dispersion of Indigenous staff. A cursory glance of the Indigenous university employment topography reveals the majority are located in Indigenous specific sites such as the Indigenous centres/Colleges and Institutes. Very few Indigenous staff are employed across schools and faculties and the opportunity to employ Indigenous staff in the service areas, grounds, laboratories, human resources and the faculties does not yet appear to have been fully considered. These figures also do not reveal the frequency of Indigenous staff being employed on a casual, temporary or short term contract basis. Instability in employment, especially within the Indigenous support centres, is a significant contributor to program under-development and lost opportunities. Success, especially for Indigenous students, is built on trust and requires continuity in relationships and staff. Temporary or casual employment for Indigenous staff has other negative flow-ons for Indigenous higher education success, including a lack of confidence in universities as an employer.

How do universities become the Indigenous employer of choice? We seek evidence and case studies of good practice within universities. In the mean-time we make the following suggestions. First, via contractual arrangements with the Department of Education, Employment and Workplace Relations (DEEWR) attached to the receipt of Indigenous Support Funds most universities have now established Indigenous employment strategies. Rather than focus on traineeships, as currently seems to be occurring, universities need to embrace the idea of Indigenous employment strategies as vehicles for the strategic, long-term development of an Indigenous workforce with parity of representation across all employment areas.

Linking low Indigenous staff with low student participation

The lack of Indigenous staff within universities is also centrally connected to Indigenous student success at both undergraduate and postgraduate level. At present the vast majority of Indigenous staff, in Australian universities are positioned within Indigenous centres and while, as argued, these centres are vitally important, as a consequence, outside of these centres, the university remains a virtually Indigenous free-zone. These patterns send a powerful underlying message to both Indigenous and non-Indigenous students about the place of Indigenous people within the higher education sector, as both separate and different. It also means that Indigenous students are largely bereft of role models and culturally competent support and supervision outside the Indigenous centres.

To remedy this situation, we need to create a platform for the development of an Indigenous academia so that Indigenous staff teach and research across all disciplines. The adage of "growing your own" is particularly relevant to building a core of Indigenous academics to be role models and to lead a resurgence of Indigenous research activity. To do this universities need to commit to employing Indigenous staff from the current and future student cohort and also support current Indigenous staff to develop their academic qualifications and profiles. Indigenous employment needs to become standard within universities and not just into the centres and should be funded from the operational budget of the university rather than rely on external subsidised funding.

Supporting better strategy development with better data

Our examination of the body of literature surrounding Indigenous higher education and graduate employment leads us to call for a more targeted approach to research in this area. Good policy development is dependent on good quality empirical evidence and the literature discussed above, while valuable, has inadequacies. The problem appears to fundamentally lie with the level and type of data available rather than the studies themselves. Many studies are essentially descriptive; reporting aggregate data rather than examining how identified patterns might be explained or, more importantly, altered. Smaller-scale qualitative studies develop a richer picture but their respondent experiences cannot be directly generalised. Finally, while some explanatory models are developed (e.g., Biddle et al., 2004) these are constrained by the limited sources and cross-sectional nature of Indigenous data. For example the 1994 and 2002 NATSIS allow us to measure change in aggregate educational indicators but not to directly track the pathways taken by Indigenous students. In turn, longitudinal data sources such as Household, Income, Labour Dynamics in Australia

(HILDA), the Negotiating the Life Course Project (NLC) or the Longitudinal Study of Australian Youth (LSAY) contain insufficient Indigenous cases to provide meaningful results. The upcoming Longitudinal Study of Indigenous Children (LSIC) will provide such data, but as the project begins with infants and pre-school aged children, usable data will be a long time in gestation. As an initial strategy, we think it is time to commission a representative longitudinal study of Indigenous youth and higher education participants as either an adjunct to present studies or as a stand-alone project.

Conclusion

To reiterate, Indigenous higher education is core university business. If we are to redress current inequities in Indigenous higher education the university sector and individual universities must adopt a leadership role. To realise the potential of higher education for Indigenous people in Australia, universities must work with their Indigenous students, their Indigenous centres and their Indigenous communities to create stimulating but specifically supportive learning environments. The key ingredients of success and sustainability of Indigenous student supportive environments lie in their responsiveness to students and the tailoring of specific programs to directly meet our students' needs.

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References

Attinasi, L. C. (1989). Getting in: Mexican Americans' perceptions of university attendance and their implications for freshman year persistence. *Journal of Higher Education, 60*(6), 247-277.

Biddle, N., Hunter, B. H., & Schwab, R. G. (2004). *Mapping Indigenous education participation* (CAEPR Discussion Paper No. 276). Canberra, ACT: Australian National University.

Bin-Sallik, M. (2000). (Ed.). *Aboriginal women by degrees: Their stories of the journey towards academic achievement*. Brisbane, QLD: University of Queensland Press.

Bourke, C., Burden, J., & Moore, S. (1996). *Factors affecting performance of Aboriginal and Torres Strait Islander students at Australian universities: A case study*. Canberra, ACT: Commonwealth of Australia.

Bunda, T., & McConville, G. (2002). Indigenous higher education, myths, cuts and obvious decline. *Campus Review*, May 29-June 2, 13-18.

Deadly Vibe. (2004, July). Dr Larissa Behrendt. *Issue 89*. Retrieved 19 July, 2006, from http://www.vibe.com.au/vibe/corporate/celebrity_vibe/showceleb.asp?id=354.

Department of Education, Science & Training (DEST). (2005). *National report to parliament on Indigenous education and training 2003*. Canberra, ACT: Commonwealth of Australia.

Department of Education, Science and Training (DEST). (2007a). Unpublished Indigenous Higher Education Data.

Department of Education, Science and Training (DEST). (2007b). *Staff 2006: Selected higher education statistics*. Retrieved 19 October, *2007*, from http://www.dest.gov.au/sectors/higher_education/publications_resources/statistics/publications_higher_education_statistics_collections.htm#staffpubs.

Eimers, M. T., & Pike, G. R. (1997). Minority and non-minority adjustment to college: Difference or similarities? *Research in Higher Education, 38*(1): 77-97.

Encel, J. D. (2000). *Indigenous participation in higher education* (Occasional paper 00/C, Higher Education Division). Canberra, ACT: Department of Education Training and Youth Affairs.

Indigenous Higher Education Advisory Council (IHEAC). (2006). *Improving Indigenous outcomes and enhancing Indigenous culture and knowledge in higher education*. Canberra, ACT: Commonwealth of Australia.

Junankar, P. N., & Lui, J. (1995). *Estimating the social rate of return to education for Indigenous Australians* (CAEPR Discussion Paper No. 276). Canberra, ACT: Australian National University.

Lane, M. (1998, October). *The keys to the kingdom: Effective student support mechanisms and mass Indigenous tertiary education success*. Paper presented to Australian Federation of University Women National Conference, Perth, Western Australia, Australia.

Morgan, D. (2001). Indigenous education: Factors affecting students' decisions to continue or withdraw from tertiary studies at Flinders University. *International Education Journal, 2*(4): 233-239.

National Board of Employment, Education & Training (NBEET). (1999). *Rural and isolation students and their higher education choices: A re-examination of student location, socio-economic background and educational advantage and disadvantage*. Canberra, ACT: AGPS.

Taylor, J., & Liu, J. (1996). *Change in the relative occupational status of Indigenous workers, 1986-1991* (CAEPR Discussion Paper No. 104). Canberra, ACT: Australian National University.

Taylor, J., & Hunter, B. (1997). *A profile of Indigenous workers in the private sector*. (CAEPR Discussion Paper No. 137). Canberra, ACT: Australian National University.

Tinto, V. (1974). Classrooms as communities: Exploring the educational character of student persistence. *Journal of Higher Education, 68*, 6 Nov/December.

Western, J., McMillan, J., & Durrington, D. (1998). *Differential access to higher education: The measurement of socio-economic status, rurality and isolation*. Canberra, ACT: AGPS.

White, N. (2000). Creativity is the name of the game. In M. Bin-Sallik (Ed.), *Aboriginal women by degrees: Their stories of the journey towards academic achievement* (pp. 92-106). Brisbane, QLD: University of Queensland Press.

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