

## Growing the desert: Educational pathways

## for remote Indigenous people

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The views and opinions expressed in this document are those of the author/project team and do not necessarily reflect the views of the Australian Government, state and territory governments, the Desert Knowledge Cooperative Research Centre or NCVER



#### Publisher's note

Additional information relating to this research is available in *Growing the desert: Educational pathways for remote Indigenous people—Support document.* It can be accessed from NCVER's website <a href="http://www.ncver.edu.au/publications/1911.html">http://www.ncver.edu.au/publications/1911.html</a>>.

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## Foreword

This research was completed over 2005—06 as part of the National Vocational Education and Training Research and Evaluation program, a research program managed by the National Centre for Vocational Education Research (NCVER) and funded by the Department of Education, Science and Training on behalf of the Australian Government and state and territory governments. The research was further supported and undertaken by the Desert Knowledge Cooperative Research Centre and its partners. Desert Knowledge CRC is supported by funding from the Australian Government Cooperative Research Centres Programme.

In 2004 NCVER developed a national Indigenous research strategy for vocational education and training (VET) in partnership with the former Australian Indigenous Training Advisory Council, and this report forms a key aspect of that strategy (available on the NCVER website).

This is the first time that a substantial analysis of Indigenous people's participation in VET in Australian desert regions has been undertaken. The research adopts a detailed approach to exploring relevant data sets, including the Census of Population and Housing, the Community, Housing and Infrastructure Needs Survey and VET participation and outcomes data from NCVER.

Four case studies provide a snapshot of the diverse responses to building desert people's capacity for livelihoods and employment and add depth to the data. The supporting documents, which provide more detail on these case studies, can be downloaded from the NCVER website.

The findings of this report will be important for anyone interested in the wellbeing of Indigenous Australians, and is likely to be of practical benefit to those training organisations active in the desert regions of Australia.

Readers are pointed to another report of interest in this area: Aspects of training that meet Indigenous Australians' aspirations: A systematic review of research by Cydde Miller.

Tom Karmel Managing Director, NCVER

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## Key messages

This study maps the participation of desert Indigenous people in the Australian vocational education and training (VET) sector and in non-formal adult and community education (ACE) learning programs, and analyses the contexts in which learning occurs across the desert.

- ♦ There is evidence of significant fluctuation and some decline occurring in the participation of desert Indigenous people in VET. Outcomes in terms of completions and qualifications are poor.
- ♦ VET participation is not providing desert Indigenous people with pathways from learning to work, or into higher-level education. Indigenous labour force participation rates have declined substantially across remote areas of Australia since 2002, despite the relatively high participation rates of desert Indigenous people in VET.
- ❖ There is a significant misalignment between the content and delivery models of VET and the prior skills, educational demands and aspirations of desert Indigenous people. VET programs struggle to adapt to and address the types of learning needs that arise as a result of language and cultural differences and the different ways work is constructed and occurs across the desert.
- ♦ Distinct cultural, demographic and geographic landscapes define Australia's desert regions. These contexts require a combination of educational investments and supports, and real engagement with the types of livelihoods and economies emerging in desert regions.

## Executive summary

### Project overview

This study examines data and issues related to the participation of Indigenous people in vocational education and training (VET) and adult and community education (ACE) across the desert regions of Australia. It maps the context of training delivery in terms of demography, infrastructure and access to services, and draws together a summary of data from a variety of sources. In mapping the picture of what is occurring with VET provision across the desert, the study has only minimally elicited the perspectives and preferences of Indigenous people, primarily through some of the case study research. This is acknowledged as a limitation of the study and is seen as a key area for future collaborative research.

Indigenous people of Australia, compared with non-Indigenous people, experience overwhelming disadvantage across every indicator of social and economic wellbeing. In education this disadvantage is experienced across all sectors and, while Indigenous students are participating at relatively high rates in VET, their pass rates and qualifications remain well below those of non-Indigenous Australians.

There is emerging evidence that Indigenous participation in VET across the desert may be decreasing and that there has been a significant decline in the labour force participation of remote Indigenous people since 2002. This suggests a mismatch between the largely mainstream VET offerings available across the desert and the place-based livelihoods and work opportunities available locally; there also appears to be a mismatch between the needs and aspirations of learners themselves and what is being supplied. The unique geography, demography, settlement patterns and cultural diversity of the arid and semi-arid regions of Australia present unique challenges for the delivery of all services, including education.

### Project aims

This study presents a statistical and descriptive analysis of desert settlements, infrastructure, access to services and participation in VET. The research questions addressed in this report focus on:

- ♦ the supply of and demand for VET and the pathways through VET to work and livelihoods enabled within and across Indigenous desert contexts
- the factors affecting VET delivery and outcomes, including mobility and small dispersed populations, and the fit between local needs and aspirations and the educational content and delivery provided
- ♦ the differences between jurisdictions that cover the desert, in the context of factors such as mobility and small dispersed populations, and their effect on VET delivery and outcomes
- ♦ successes in VET provision across the desert and how does or can VET provision align with
  emerging local economies and livelihood activities.

### Methodology and approach

The research utilised a combination of quantitative and qualitative methodologies in order to obtain a rich understanding of VET provision in desert Indigenous contexts. The study progressed through four interrelated stages: a broad literature review; an analysis of key data sets relating to desert people and contexts; an interactive online forum to elicit the perspectives and experiences of desert-based or interested educational practitioners; and four in-depth and diverse case studies to explore innovative approaches to learning and work occurring across the desert. The data sets included 2003 and 2004 National Centre for Vocational Education Research (NCVER) data for the specified desert region, Australian Bureau of Statistics (ABS) 2001 census data, the 2001 Community Housing and Infrastructure Needs Survey, the 2002 National Aboriginal and Torres Strait Islander Social Survey and 2006 Small Area Labour Market data.

A number of data issues arise from the methodology employed, including the nature of the data itself. Indigenous population counts are prone to a number of subjective assessments. Most notably, those of self-identification and under-enumeration are well acknowledged. Furthermore, the comparability of the data sets utilised is compromised by boundary differences, with some using statistical local area boundaries and others using postcodes and non-geography specific Accessibility/Remoteness Index of Australia (ARIA) regions. Response rates for the desert region in some NCVER data sets were very low, producing results of questionable value. Moreover, many of the data sets are five years old and therefore subject to recent demographic changes.

## Key findings

The study highlights some of the issues that impact on educational pathways for Indigenous people across the desert, including uncertainties inherent to the new government arrangements in Indigenous affairs. It analyses the range of innovations, adaptations and approaches required to improve health, wellbeing and futures for desert Indigenous people.

These can be summarised as follows.

- ❖ The settlement patterns of Indigenous people across desert Australia are unique. They have been and are being shaped by policies and practices of successive governments and service delivery regimes. These patterns are also determined by kin and country. The ongoing viability of these settlements—economically, socially and culturally—is still emerging. Of the 33 186 Indigenous people in the desert, more than 4000 live on communities of fewer than 50 people, while the largest communities have populations of no more than 1000. Indigenous desert people are highly mobile across the region—for cultural reasons and for service access reasons. Population growth estimates for Indigenous desert people are positive, particularly in the prime working-age group of 25 to 64 years.
- While there is significant mobility of Indigenous people within the desert region, there is also some suggestion of population drift to larger desert service centres. New policies and initiatives in Indigenous affairs may have some impact on patterns of mobility and migration to larger centres in the coming years. There are pressures on housing and infrastructure in discrete desert communities. If the trends of urban drift consolidate, these housing and infrastructure pressures are likely to be transferred to larger centres.
- Desert discrete Indigenous communities are more disadvantaged than discrete Indigenous communities in other remote and very remote localities in Australia, particularly in terms of education and employment opportunities. Changes to the nature and structure of Indigenous land tenure, especially in the Northern Territory, are underway. This may have some future impact on economic development opportunities and the demand for education, local employment and enterprise development.

- ♦ Access to school education services across the desert is relatively poor, especially at secondary and senior secondary levels. Access to payphones, private phones and the internet is significantly constrained across the desert, but especially in Northern Territory desert areas.
- ❖ The main employment opportunity for desert Indigenous people is the Community Development Employment Projects (CDEP) scheme. Only one in six working-aged desert Indigenous people is in non-scheme employment. However, the scheme is currently being transformed into a transition-to-work scheme in regional areas, and a more targeted work-forthe-dole scheme in remote areas. Limited participation periods, aligning scheme work to equivalent mainstream work or skill shortages, and changes to youth rates present emerging challenges and some opportunities for training and employment across the desert.
- ❖ In 2003 desert Indigenous participation rates in VET were high and were clustered around certificates I and II. In 2004 there was a decline in participation rates and a shift from certificates I and II courses to subject-only enrolments. Only 4% of desert Indigenous people hold a certificate qualification. High participation rates do not equate with certificate completions.
- ♦ Desert Indigenous people are not participating to any great extent in the areas of learning where most jobs in the desert currently exist—the mining and retail sectors. This may change as a result of more focused Community Development Employment Projects scheme activities but will be dependent on increased flexibility and responsiveness from the VET sector, including increased delivery in community locations.
- ♦ More than half of desert Indigenous people speak an Indigenous language as their first language, but they comprised less than one-third of the cohort participating in VET in 2003. This proportion declined in 2004. Fluency in English appears to be a prerequisite for VET participation but is not being gained through school participation.
- ❖ Desert Indigenous people participate in VET largely through non-formal, ACE-type courses and learning programs rather than vocationally oriented courses. Even where 'real' employment opportunities are evident, such as in the Aboriginal art industry, informal and non-formal learning dominates. A great deal of 'other' educational activity takes place outside the formal education sector and constitutes the bulk of flexible and innovative responses to learning and development across desert Indigenous communities.
- ❖ In the case studies long-term commitment to improving livelihood opportunities for Indigenous people was evident; this commitment assisted in nurturing and sustaining the partnerships, which were crucial to the success of the initiatives. The important role of non-government organisations in linking governments and other agencies to local people and facilitating effective communication and access to services and support is largely a result of their long-time presence in desert landscapes.
- ♦ Formal VET training has been or is envisaged to be a key aspect of each of the case study sites. The training has involved non-formal elements and flexible and innovative delivery and associated support arrangements, including mentoring with Indigenous elders. Innovation and flexibility have arisen directly from the partnership approaches utilised.

## **Implications**

VET services to Indigenous desert people struggle to meet both expressed demand and relevance. The emerging trend appears to be increased social and economic exclusion and, even after participation in VET programs, decreasing pathways into work or meaningful study. There is also some suggestion that the high participation rates in VET reflect the same people being churned through lower-level VET courses or, more recently, subject-only courses, and minimal progression into paid work.

The significant changes underway in Indigenous affairs and especially changes impacting on the Community Development Employment Projects scheme, along with the removal of remote area exemptions for job search and the impact of other mutual obligation activities, necessitate some urgency in building the relevance and responsiveness of VET. While much of the policy rhetoric surrounding these changes focuses on aligning training effort with 'mainstream' work opportunities, the reality is that training effort will also need to engage with emerging and local livelihood opportunities. Unless there is to be a massive and largely enforced relocation of desert Indigenous people out of their homelands, meaningful work opportunities will need to be nurtured and supported at the local level. This presents a significant challenge to the VET system.

This research stresses the critical importance of innovation, flexibility, sustainability and responsiveness to and inclusion of local demand and aspirations, especially through local organisations, in making a difference to desert people's lives and wellbeing. The evidence also suggests a re-invention and re-alignment of VET services away from supplying predetermined delivery and content that leads to neither relevant and usable qualifications nor pathways into work or meaningful livelihood activities. Positioning VET as part of a continuum of learning and development opportunities that together offer some hope of transforming lives and economies in desert regions is crucial.

## Introduction

Indigenous people of Australia, compared with non-Indigenous people, experience 'overwhelming' disadvantage across every indicator of social and economic wellbeing (Steering Committee for the Review of Government Service Provision 2005). In education this disadvantage is experienced across all sectors. Indigenous primary school students are less likely to achieve Years three and five literacy benchmarks (Ministerial Council on Education, Employment, Training and Youth Affairs 2003; Zubrick et al. 2006); Indigenous students of secondary age are almost half as likely to achieve Year 12 (ABS 2006b); and, while Indigenous students have participated at increasingly higher rates in vocational education and training (VET) since 1999, their pass rates and qualifications outcomes remain well below that of non-Indigenous Australians (NCVER 2005). While Indigenous participation in VET in the desert is 'holding its own' along with population growth (NCVER National VET Provider Collection), there are significant declines in the labour force participation of remote Indigenous people since 2002 (ABS 2006a; Johns 2006).

Australia's Indigenous people and their cultures are diverse, and locality plays a significant role in both articulating such differences and in influencing the nature of access and outcomes achieved from education and other services (ANTA 2000; Golding & Pattison 2004). Analysis of data from the Australian Bureau of Statistics (ABS) 2001 Census of Population and Housing (ABS 2002a) identifies that residents of regional and remote Australia have consistently lower rates of attendance in the non-compulsory Years 11 and 12 and that the proportion of people with non-school qualifications declined with increasing remoteness. The association between lower educational attainment and remoteness is often attributed to the higher numbers of Indigenous people residing in remote and very remote Australia (Guenther 2004; Guenther & Falk 2003), and more recently such associations have also been somewhat contentiously attributed to policies of the past 30 years that have sought to support Indigenous languages and cultures in educational contexts (Johns 2006).

As noted by Boughton and Durnan (2004), the flavour of the discourse about Indigenous people and education in Australia is infused with notions of disadvantage that resonate as deficit analyses, locating the heart of the problem as residing with the individual or group rather than with the system. More recently, and especially since the demise of the Aboriginal and Torres Strait Islander Commission (ATSIC) in 2004, the 'problem' of Aboriginal education, and indeed Aboriginal advancement, has been increasingly coupled with questions about the viability of remote settlements (Hughes & Warin 2005), and the apparent economic stranglehold of communal land tenure that leaves remote Indigenous people 'land rich and dirt poor' (Vanstone 2005). Integral to the new flavour of debate about remote Indigenous Australians are the notions of expanding educational orbits (Pearson 2004a), harnessing the mainstream in terms of educational and employment pathways (Department of Employment and Workplace Relations 2006b; Office of Indigenous Policy Coordination 2004) and enforcing 'rights' alongside of 'responsibilities'.

In the light of the new mainstreaming in Indigenous affairs (Altman 2004) equity is being ramped up as sameness—same opportunities, same choice, same penalties—and pays little heed to the fact that reducing the relative disadvantage between Indigenous and non-Indigenous Australians may indeed require differing inputs and investments, as well as the participation of the end-users in designing and taking responsibility for the services and incentives deployed to achieve such outcomes. For example, the lifting of remote area exemptions on job search activities for receipt of Centrelink benefits is occurring progressively across remote communities. Non-fulfilment of agreed activity tests will result

in reduction of and even cancellation of income support benefits. The 'new' approaches in Indigenous affairs largely constitute a progressive extension of mainstream program models (for example, welfare to work) to remote Indigenous domains. Applied to desert contexts, these initiatives are forging an alternative landscape of what counts as meaningful community and work activities and causes some friction over what constitutes work and achievements in contexts of difference, far from markets and marked by a range of hybrid rather than mainstream economic activities (Altman 2004).

The apparent decline in the participation of desert Indigenous people in VET, alongside anecdotal but substantive reports of decreasing community access to post-compulsory education, raises critical issues for the impact of new arrangements in Indigenous affairs. In an earlier report from this project (Guenther et al. 2004) we noted a significant mismatch between mainstream VET offerings and the emerging place-based livelihood activities across desert settlements. The tensions apparent in this mismatch will arguably exert some influence as changes in the broader Indigenous affairs environment are bedded down. For example, the reconfiguration of the Community Development Employment Projects scheme as a welfare-to-work rather than a work-substitution scheme will transform a range of essential services, community services and arts-based activities in remote areas and require a similar transformation in the range and accessibility of compulsory and post-compulsory education offerings in communities, especially if the scheme is to be a stepping stone to mainstream economic participation.

The publicity surrounding issues of dysfunction and violence in remote communities that has resurfaced in recent times would seem to be providing substantial justification for new policy directions in Indigenous affairs. Remote communities are now defined exclusively in terms of their dysfunctionality.

The link between socioeconomic disadvantage and dysfunctional family and community life has a marked and increasing spatial dimension in Australian society. Whether clustered in urban or remote areas, characteristics of poor health, intergenerational welfare dependency, interaction with the criminal justice system and high levels of domestic and other forms of violence are similar (Rogan 2002). In the emerging rhetoric surrounding remote Indigenous communities, issues of culture and difference are surfacing as explanations for disadvantage and dysfunction (Hughes & Warin 2005; Johns 2006). This alignment of disadvantage, dysfunction and culture and remote places raises particular issues for the range and nature of the educational and economic pathways provided. Government and community responses to the spatial nature of social exclusion and disadvantage have in recent years embraced a community capacity-building approach, whereby local solutions and community renewal strategies are bolstered by attempts to implement whole-ofgovernment approaches. With unprecedented support and leadership from high levels of government, whole-of-government arrangements and local solutions negotiated through 'shared responsibility agreements' are the hallmark of current approaches in Indigenous affairs (Sullivan 2005). While these agreements largely leverage discretionary funding to support activities and interventions at a local level, they are underpinned by strategies to attract mainstream players to support the social and economic outcomes required to reduce disadvantage. Funding for a swimming pool through a shared responsibility agreement will entail community members agreeing to a no-school no-pool policy and ensuring their children attend school. Thus mainstream government education services underpin the effectiveness of the agreement and may falter in supporting the initiative if student numbers outstrip the availability of teachers or classrooms, as occurred recently at Wadeye in the Northern Territory (Shiel 2005).

## Methodology and approach

A suite of research questions informed each stage of the project. The complete list of research questions guiding the research are as follows.

♦ How effectively does VET supply match demand across the desert and respond to new livelihood opportunities?

- ♦ To what extent are Indigenous VET students in the desert moving through to work and/or livelihood activities, both Community Development Employment Projects scheme and others?
- What factors, such as mode of delivery, industry-focused training packages, localisation of content and delivery, relationships between providers and learners, existing and potential partnerships, use of local knowledge systems and processes, impact on effective educational pathways for Indigenous learners?
- ♦ What myriad of experiences and realities impacts on effective provision and improved Indigenous learner outcomes in VET?
- ♦ To what extent are appropriate demand-responsive approaches being employed in desert Australia by the VET system and its identified providers?
- ♦ What is working in VET provision across the desert and what needs to be put in place to foster successful engagement and outcomes through VET?
- ♦ How do different jurisdictions and differences between jurisdictions (and desert factors such as mobility and small highly dispersed communities) enable or constrain VET approaches to supply and demand and new livelihoods opportunities?
- ♦ What are the current skills ecosystems and the emerging trends for developing thriving desert economies that could impact on Indigenous learners' pathways through VET and into the world of work?
- ♦ How could a better informed VET system and its providers utilise identified skill ecosystems and new desert economies to have a positive impact on Indigenous learners' pathways through VET and by so doing, increase their social, cultural, environmental and economic wellbeing?

Stage one of the project consisted primarily of a standard literature review updated over time and analysis of various data sets that relate to a range of indicators of wellbeing for the desert. The data sources include:

- ♦ Australian Bureau of Statistics 2001 Census Data (drawn from ABS 2002a, 2002c, 2003a, 2003d)
- ♦ 2002 National Aboriginal and Torres Strait Islander Social Survey (ABS 2004b)
- ♦ National VET statistics compiled by the National Centre for Vocational Education Research (NCVER)(drawn from the National VET Provider Collection, National Apprentice and Trainee Collection and the Student Outcomes Survey)
- ♦ The Community Housing and Infrastructure Needs Survey (ABS 2002b)
- ♦ Small Area Labour Market data (Department of Employment and Workplace Relations 2004, 2005, 2006d).

Where possible, data sets were queried according to geographical areas to produce a consistently comparable set of regionally based statistics. In the case of census data, the areas are the statistical local areas (SLAs) shown in figure 1. Where references to ABS data are made in this report, these are often derived from the source data contained in a publicly available database.

Stage two of the project developed and implemented an online forum targeting desert-based or interested educational practitioners. Potential participants were identified through project researcher networks and publicly available registered training organisation staff lists. The online forum was hosted on the Desert Knowledge website and ran over an eight-week period. A new topic area with a relevant discussion paper which had been developed from the information gathered in stage one was posted each week. Postings were afterwards analysed to identify major themes and issues and summarised in this report.

Stage three of the research consisted of four in-depth case studies in which the methodology and approach were negotiated with collaborating agencies and/or individuals. Each case study thus employs methodologies unique to its focus and the extent of engagement of Indigenous people in

the research process. The case studies, along with the methodologies and approaches utilised, are contained in the support document.

The research project received ethics clearance through the Ethics Committee of Charles Darwin University. Furthermore, each of the case study projects were submitted to the ethics committee, as the project methodology and scope were negotiated with participating individuals and or organisations. The case study undertaken in collaboration with Waltja Tjutangku Palyapai also received ethics clearance from the Central Australian Human Research Ethics Committee.

### Data issues

A number of data issues arise from the methodology employed here, as well as from the nature of the data itself. Firstly, the geographic approximations and estimates used are subject to some error, mainly due to boundary estimations. The statistical local areas shown in figure 1 are themselves an approximation of the arid zone—the boundary between arid and semi-arid is only loosely defined, based on rainfall levels and evaporation (for example, Morton, Short & Barker 1995) or vegetation (Commonwealth Scientific and Industrial Research Organisation 2005). While census data are perhaps the most reliable in that they attempt to capture all residents, the data are still subject to the interpretation of questions by respondents. Given also that at the time of writing this report, the 2006 census had been conducted, with results not expected for several months, much of the data used for this report are five years old and therefore subject to recent demographic changes. In particular, Indigenous population counts are prone to a number of subjective assessments, most notably that of self-identification (Dumbrell 2000; Ross 1997) and a range of other assumptions about the Indigenous population, including migration, Indigenous births and deaths, and coverage issues (Shahidullah & Dunstan 2000). Attempts to obtain mutually comparable sets of data used for this research were frequently frustrated by boundary differences. For example, while ABS census and surveys and the Department of Employment and Workplace Relations Small Area Labour Market data used comparable statistical local area boundaries, NCVER used postcodes and nongeography specific Accessibility/Remoteness Index of Australia regions.

In relation to the NCVER data subsets obtained, the low response rate for the desert region means that any comparative or even internal analysis is of questionable value. For the Student Outcomes Surveys, around half of the 52 postcodes covering the desert region recorded zero respondents for both module completers and graduates. Overall for the 2004 Student Outcomes Survey, there were only 122 module completer responses and 242 course completers. These figures represent a relatively small proportion of the 910 completions reported by NCVER for the desert region for a comparable period. The voluntary nature of the surveys is itself an issue for the integrity of the data, as is the nature of the survey, as a self-administered, mail-back survey. The complexity of the survey would naturally exclude many non-English speaking Indigenous trainees and others with low levels of literacy and numeracy. These problems were further compounded by data that had been under-reported or reported with missing geographic or Aboriginal and Torres Strait Islander identifiers. In 2004, to address issues with Indigenous responses to mail-out student outcomes surveys, NCVER commissioned an Indigenous-specific survey utilising face-to-face interviews (NCVER 2005c). Data from this survey were not utilised in this report as response rates for desert regions within the remote and very remote categories were also very low.

Part of the aim of this project is to assess what is happening in the adult and community education (ACE) sector. This is particularly problematic. Nationally there is a myriad of providers, all with their own methods for evaluating performance (Clemans, Hartley & Macrae 2003). ACE programs are often conducted with little or no external financial support and some jurisdictions do not have an overseeing ACE body (such as the Northern Territory and Western Australia). We have therefore not attempted to quantify ACE participation data for the desert region.

## Scoping the desert

Figure 1 shows the region, based on statistical local areas, defined as the desert for the purposes of this study, overlaid with the discrete Indigenous communities as identified in the Community Housing and Infrastructure Needs Survey (2001). This delineation is based on earlier work undertaken by John Taylor (2002b) into population futures for desert Australia. While he considers both arid and semi-arid zones, we have limited our analysis to the arid zone. On this basis the desert comprises 45% of Australia's land mass.

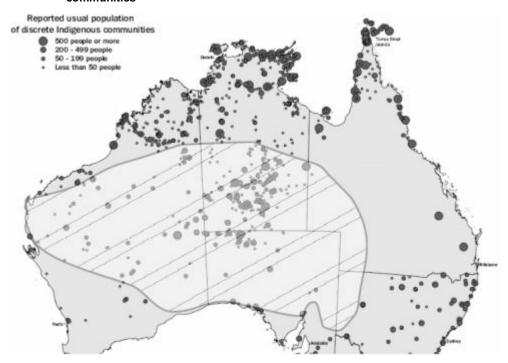


Figure 1 Desert region overlay (approximation) of Community Housing and Infrastructure Needs survey communities

Source: Adapted from ABS (2002b) and Taylor (2003b).

Table 1 shows key demographic statistics for the desert region based on the geographic areas of figure 1 and ABS census data. At the time of the 2001 Census of Population and Housing, the reported residential population was 163 405, with 33 186 of these, Indigenous people. While it is recognised that issues exist with under-enumeration in remote desert Australia (Taylor 2003b), Indigenous people comprise one-fifth of the total desert population—nearly one-third for youth aged 15 to 24— compared with around 2% of the population nationally. This proportion is predicted to increase to 23.7% by 2016, with a 34% increase in the prime working-age cohort—25 to 64 years (Taylor 2002b, p.vii). By contrast, the population of non-Indigenous people in the desert region has been decreasing since 1986 (Taylor 2003b). Table 2 shows that more than 80% of the Indigenous population of the desert region are located in the Northern Territory and Western Australia.

Table 1 Key demographic statistics for the desert based on geographic regions shown in ABS census data

	Indigenous	Non-Indigenous	Total population
Population	33 186	130 219	163 405
Population aged 15+	20 509	95 817	116 326
Population aged 15 to 24	6 261	13 425	21 436
Change in population since 1991	24.0%	-2.2%	2.1%
Percentage of population who speak an Indigenous language	54.6%	0.2%	11.6%
Average household size	3.9	2.6	3.1

Source: ABS (2002a, 2003d)

Table 2 Desert region Indigenous population by jurisdiction

State	Total 2001 Indigenous population	Percentage of total
New South Wales	1 106	3.3
Queensland	447	1.3
South Australia	4 271	12.9
Western Australia	11 672	35.2
Northern Territory	15 690	47.3
Total	33 186	100.0

Source: ABS (2002a)

The settlement patterns of Indigenous and non-Indigenous people across the desert region diverge quite significantly. While the majority of non-Indigenous people reside in the key service centres, such as Alice Springs or Halls Creek, or in mining towns, Indigenous people are highly dispersed across the region, residing in small remote communities. Analysis of the 2001 Community Housing and Infrastructure Needs Survey (ABS 2002b) enables us to identify 457 discrete Indigenous communities within the desert region with a combined population of 28 053. A discrete Indigenous community is defined by the ABS (2002b, p.87) as a geographic location, bounded by physical or cadastral (legal) boundaries, and inhabited or intended to be inhabited predominantly (that is, greater than 50% of usual residents) by Aboriginal or Torres Strait Island people, with housing or infrastructure that is managed on a communal basis.

Seventy-two per cent of discrete Indigenous communities in the desert region have a population of less than 50. The Northern Territory has the highest numbers of communities with fewer than 50 people and Western Australia has the largest number of communities with a population of 50 or more. No discrete Indigenous community in the desert region has a population greater than 1000. Availability of potable water in desert areas, as well as the stresses experienced by co-location of diverse language and family groupings, would seem to play some role in limiting population size. The dispersal of these communities, their distance from major service centres and their small size raise considerable issues for the delivery of services

### Remote Australia and remote desert Australia

The 2002 ABS National Aboriginal and Torres Strait Islander Social Survey (ABS 2004b) enables us to compare remote desert Australia with remote Australia generally across a range of indicators. As many data sets relevant to Indigenous people utilise the Accessibility/Remoteness Index of Australia (ARIA), identifying diversity within and between regions considered remote is important. The following analysis of the survey data enables a comparison between the desert region and other remote regions of Australia. The desert region is effectively a subset of the greater remote and very

remote regions identified above and spatially accounts for a little over a half of such regions. In terms of population, however, the desert region comprises less than a third of the total Indigenous population of remote Australia. The smaller population and the dispersed settlement patterns of the desert regions are discussed below. Key differences between desert and other remote areas can be elicited from the data. Generally, employment and education opportunities in the desert region are less than what might be expected in other remote parts of the same jurisdictions. Attainment of certificate or diploma qualifications tends to be much lower in desert regions, as is completion of Years 11 and 12, although there are notable inter-jurisdictional differences with the latter. The proportion of Indigenous people who speak an Indigenous language is similar across desert and other remote areas (54.4 and 54.6%, respectively), suggesting that 'cultural issues', for which language is often read as a proxy, is not inevitably a barrier to educational attainment.

### Settlement patterns and mobility

The majority of today's larger settlements or 'communities' were initially established as ration stations or missions, under policy regimes, firstly of protection, then assimilation and, more recently welfare dependency (Memmott & Moran 2001; Pearson 2001, 2004b; Rowse 1998). These settlements can be described as 'artificial' in the sense that they were established by outside authorities and were not driven by the factors that usually underlie settlement establishment such as proximity to resources, employment or markets. Nevertheless, many of these settlements did supply a pool of workers for the pastoral and other local industry and did facilitate some ongoing connection to country. In the past 30 or so years there has been a substantial transfer of land across desert Australia to Indigenous ownership under, for example, the 1976 Northern Territory Land Rights Act and the 1981 Pitjantjatjara Land Rights Act. Significant tracts of land have been and continue to be purchased by the Indigenous Land Corporation and more are being claimed under Native Title (National Native Title Tribunal 2006). Around half of the land mass of the Northern Territory is Indigenous land.

The pattern of settlements across the desert region has been established relatively recently. The predominantly land-based enterprises and activities accommodating Indigenous people (that is, pastoral work) and the persistent land rights activism that saw a very early rise to what has been called the homelands movement (1960s), as well as recognition of traditional rights to land, have resulted in unique patterns of settlement and persistent expressions of cultures and traditions.

The high number of communities of fewer than 50 people across the desert identified in the 2001 Community Housing and Infrastructure Needs Survey is a clear indication of the extent of this movement. While it can be claimed that the homelands movement has facilitated ongoing connections to country and synergies between traditional living arrangements and the more contemporary family groupings within homelands, it has also raised significant difficulties for the provision and maintenance of the types of basic services deemed necessary for healthy and safe living—housing, water, sanitation and power supply. Furthermore, small numbers, limited facilities and access difficulties indicative of homeland living, compound the provision of education services. However, homelands also provide a 'safer, healthier and culturally more satisfying lifestyle, free of the social stresses, alcohol abuse, petrol sniffing and domestic violence of some of the larger communities and towns' (McDermott et al. 1998, p.653). These stresses are often the very factors that impact on the effectiveness of teaching and learning in larger communities (Charles Darwin University & Northern Territory Department of Employment, Education and Training 2004). The conundrum for education in these environs is how to bridge the tensions between policies predicated on assumptions about student numbers, available facilities and work opportunities, and the realities of people and place in the desert. As valuable as it is to understand Indigenous settlement patterns across desert Australia, it is also important to recognise that assuming permanent domicile of Indigenous people within one community is incorrect. Recent research on Indigenous mobility has identified patterns of circular mobility between smaller communities, larger communities and townships, predicated on kin relationships or the need to access services (Memmott et al. 2004; Memmott, Long & Thomson 2006).

The varying array of resource investments in Aboriginal communities and the sporadic investments in homelands developments have spawned a technologically facilitated (Toyotas more than telephones) mobility that has escalated over the past 20 years or so (Taylor & Bell 1999). While much of this mobility converges within what has been termed the Indigenous domain, there are increasingly external push-and-pull factors that influence mobility patterns. These tend to emerge at the cultural interface. Taylor (2003b) has identified that the detachment of remote communities from services—for example, banking facilities—itself generates substantial mobility. He goes on to identify that many of the larger service centres across desert Australia, such as Alice Springs, have significant catchment populations. Whether to access banks, larger or specialist shops, hospitals or medical specialists or education, the pull towards such service centres would seem to reflect increasing mobility. There is also some suggestion of urban drift or semi-permanent relocation to larger service centres across the desert. Taylor (2006) has identified a burgeoning relocation of Indigenous people into regional towns such as Broken Hill.

There is little in the literature that explicates the association between the type and nature of educational services to Indigenous desert people and patterns of mobility. Some reports comment on issues of attendance (Charles Darwin University & Northern Territory Department of Employment, Education and Training 2004; Human Rights and Equal Opportunity Commission 2001). Most foreground the need to improve attendance, embrace community ownership and be more 'culturally appropriate' in content and delivery to encourage greater consistency in participation and outcomes (ANTA 2004; Human Rights and Equal Opportunity Commission 2000).

## Services, infrastructure and access

#### Overview

The 2001 Community Housing and Infrastructure Needs Survey data enable a closer look at the make-up of discrete Indigenous communities across the desert region. Developing an understanding of the context in which the teaching and learning facilitated by VET and other educational sectors operates and is applied is arguably crucial to improved and sustainable outcomes for Indigenous desert people in the places where they live. In many ways housing and infrastructure services encapsulate the major type of investment supplied by the mainstream to discrete Indigenous communities. On remote Indigenous communities the only permanent housing is that owned and managed by Indigenous housing organisations. Recognition of an association between high rates of respiratory and infectious diseases and poor housing and environmental health conditions has led to an increased focus on improving the functionality and design of health hardware and indeed housing and infrastructure on remote communities (Department of Family and Community Services 2003a, 2003c; Human Rights and Equal Opportunity Commission 2001). This focus exists alongside estimates of an \$850 million backlog in housing need on remote communities in the Northern Territory alone (Ah Kit 2003) and recent across-jurisdiction under-expenditure of funds allocated for Indigenous housing (Commonwealth Grants Commission 2006), a probable flow-on from the changes and uncertainty impacting on Indigenous affairs subsequent to the abolition of the Aboriginal and Torres Strait Islander Commission. There is also limited involvement of Indigenous desert people in training in the construction field (National VET Provider Collection 2005, unpublished statistics). The following summary, drawn from an analysis of 2001 data from the Community Housing and Infrastructure Needs Survey for the desert region (Guenther et al. 2005), paints a picture of the day-to-day realities facing Indigenous people living on discrete communities across the desert region, and indeed the issues which inevitably impact on educational delivery, outcomes and applicability. Although the 2006 ABS Community Housing and Infrastructure Needs Survey is currently underway, the 2001 survey data hold true across most areas.

#### Housing and infrastructure

Almost one in ten dwellings on discrete Indigenous desert communities is in need of replacement, with a further one in seven needing major repairs. In 2001 approximately half of the 457 discrete desert communities had access to one public payphone, although targeted investments in remote areas such as Telstra's 'iconnect' program may have resulted in improvements in recent years (Centre for Appropriate Technology 2002).

#### Access to education services

Access to primary and secondary education is undoubtedly a predictor of access to and success in post-compulsory education and training. Approximately half of the discrete communities within the desert region and with populations greater than 50 have a primary school located within the community. In South Australian desert regions, smaller discrete communities (population fewer than 50) would appear to have better access to primary schools compared with smaller communities in Western Australia and the Northern Territory. Overall, desert communities in the Northern Territory experience greater disadvantage in accessing a primary school.

No smaller communities have access to a secondary school up to Year 10 on their community. However, more than three-quarters of all South Australian small communities have access to a Year 10 secondary school within 50 km, compared with half of Western Australian communities and less than one-quarter of Northern Territory desert communities. Larger discrete communities in Western Australia experience the best access to Year 10 secondary schools, followed by larger communities in South Australia. Only one in twelve larger communities in the Northern Territory has a Year 10 secondary school on their community. Only one small community in South Australia and seven in Western Australia have access to a senior secondary school within 50 km. For the larger communities, nearly half of all Western Australian communities have access to a senior secondary school within 50 km, compared with one in three for larger Northern Territory communities and one in six in South Australia. In terms of access to other education services, such as technical and further education (TAFE), VET and ACE, only one-third of Northern Territory communities have access compared with nearly two-thirds of communities in Western Australia and South Australia.

The review of secondary education undertaken by the Northern Territory Government (Charles Darwin University & Northern Territory Department of Employment, Education and Training 2004) provides a detailed analysis of educational options and outcomes for Indigenous students. While covering the territory as a whole, it is likely that its findings are applicable across the desert region. The report identifies that the majority of Indigenous students are withdrawing from secondary education (or its post-primary equivalent) by Year 8 or 9. Poor access near home and the difficulties experienced in boarding options leave significant numbers of young people at risk. Declining rates of Year 7 literacy and numeracy achievement across the Northern Territory reported for 2004 and 2005 (Northern Territory Department of Employment, Education and Training 2005) further exacerbate this risk. Occasional VET programs on remote communities are therefore the only post-primary education on offer and take on the role of provider of secondary education and supply re-engagement needs and basic education within their core business of mainstream work-oriented training.

#### Community Development Employment Projects scheme

Taylor (2003a) estimates that 60% of total Indigenous income is from welfare payments. According to ABS 2001 census, of the 33 186 Indigenous people living across the desert region, 4055 are employed in the scheme and 3297 have other forms of employment. Overall, 42.5% are in the labour force (including the Community Development Employment Projects scheme), while almost 12% have never attended school. These figures highlight the stark challenges facing VET providers and other post-compulsory education services in addressing both the educational neglect and access difficulties experienced by desert Indigenous people throughout the compulsory years of schooling, and 'fitting' their offerings to the realities of desert life. While there is some argument about the employment status attached to the scheme (Ah Kit 2003; Australian Council of Social Service 2003; Northern Land Council 2003; Northern Territory Council of Social Service 2004), it has constituted the main type of 'work' on offer to Indigenous desert people and arguably does provide significant positive socioeconomic benefits (Altman & Gray 2000).

Significant changes to the Community Development Employment Projects scheme have been introduced as from July 2006. In summary these changes bring the scheme under the framework of the Australian Government's welfare-to-work agenda, reorienting the scheme as an employment assistance scheme rather than an employment replacement scheme. Projects operating in urban and regional centres where there is a Job Network provider now have a 12 months maximum participation period and a core focus on moving participants into full-time work or study. Projects in remote areas, that is, more than 90 minutes drive from an urban or regional centre, are required to align community and work activities with mainstream job opportunities and enforce a 'no work no pay rule'. Young people under the age of 20 on the scheme now receive a youth wage rather than an adult wage rate, with the difference between the two wages being directed at purchasing appropriate training for those young people (Department of Employment and Workplace Relations

2006a). The 90-minute drive catchment area for people on Centrelink benefits to undertake job-search activity, either through the scheme or through mainstream transition-to-work services, presents a significant pull factor for remote to regional centre migration. However, it may be diminished by poor road infrastructure, no public transport and the costs of commuting in areas where petrol and diesel can hit the two dollar per litre mark, as well as by the limited accommodation facilities in towns like Alice Springs.

In remote areas beyond the 90-minute rule, the transition-to-work role begs consideration of the type of work and/or livelihoods activity possible. Rather than attempting to transplant mainstream industry occupations into settings that either do not have the critical mass to support particular forms of specialisation or where future types of work could indeed be seen as emerging rather than extant, emphasis needs to be placed on innovation in learning and what counts as work. Altman (Altman 2003; Altman & Whitehead 2003) outlines a range of such emerging opportunities in the area of land and biodiversity management. The vast and substantial proportion of Indigenous landholdings across the desert region and the cultural values and knowledge held in that land perhaps offer a basis upon which Indigenous desert livelihoods for the future can be imagined. Similarly, the expanding and world-renowned Aboriginal arts industry provides a key work opportunity for talented artists and those wishing to work in other sections of the industry (Oster 2006), as do emerging roles in environmental health and housing maintenance and construction (Balding & Graham 2005).

Occurring alongside the changes to the Community Development Employment Projects scheme is the lifting of remote area exemptions for activities required for ongoing receipt of Centrelink benefits. As this policy is being rolled out, some communities, particularly those that do have a scheme, are reporting improved work ethic and attendance and community endorsement of the changes (Attwood 2006). While early positive outcomes are heartening, sustaining the momentum is likely to be incumbent on leveraging targeted and appropriate training, as well as 'real' work opportunities to ensure that the scheme is indeed a transition to something better. The place-based nature of emerging activity-testing regimes and the lack of mainstream employment opportunities in those places present a significant conundrum for the future. Furthermore, the apparent declining participation rates in VET across the desert raise significant challenges for harnessing the necessary supports to build local capabilities.

## Desert community facilities and connectivity

While the majority of all larger desert communities (population greater than 50) have at least one community facility, such as an administration building, only one-half has access to a community health centre and one-third has access to a chemist or dispensary. According to the National Aboriginal and Torres Strait Islander Social Survey (ABS 2004b), around one-third of people in remote areas experiences difficulty getting to places. On average it takes around two-and-a-half hours to reach a major service centre from a remote community, highlighting obstacles for both accessing and delivering services remotely.

Given the vast distances encountered across desert Australia, the importance of telecommunications looms. However, the National Aboriginal and Torres Strait Islander Social Survey shows that twice as many homes in remote areas compared with Indigenous Australia as a whole did not have a working telephone. A number of programs initiated with funds from the sale of Telstra have been targeting the shortfall of these services in remote Indigenous communities. While there are no current data available relating to the penetration of these targeted telecommunications services, evidence is emerging that the usage of mobile phones in areas where these services have penetrated has increased dramatically.

The National Aboriginal and Torres Strait Islander Social Survey data also show similarly poor penetration for computer use and internet access. Again a number of remote area focused programs have been sponsored by the Department of Communications, Information Technology

and the Arts, although the impact of these on usage has yet to be measured. However, findings from one of the case studies undertaken in this project would suggest that access and use of computers and the internet by Indigenous people remains problematic, even where equipment and connectivity are available in the community. These relate to where facilities have been sited, the gate-keeping role played by intermediaries and the relevance and functionality of both software and online services used.

Computer and internet usage is dependent on reliable energy supplies. According to the Community Housing Infrastructure Needs Survey, nearly all of the larger discrete communities (population greater than 50) had an energy supply, with more than half connected to state or territory grids and the rest having community diesel generators. By contrast, one in ten smaller communities had no electricity supply, with the remainder using solar or hybrid systems or domestic generators. The cost of diesel for supply to community or domestic generators has escalated in recent years. This makes problematic assumptions about the potential for information technologies to indeed be the solution to remote service delivery unless alternative sources of power or indeed greater cost subsidisation can be leveraged.

### Health and wellbeing

The spatial dimension of socioeconomic disadvantage in Australia is being increasingly documented, as is the significant concentration of such disadvantage across desert Australia (Haberkorn et al. 2004). Despite recent slight, but very welcome improvements to Indigenous health status and mortality rates (Thomas et al. 2006), the burden of chronic disease and premature death falls heavily on Indigenous desert dwellers. Recent analyses of the disability status of Indigenous people estimate that around 36.7% have an activity-impairing disability or long-term chronic health problem (Australian Institute of Health and Welfare 2006). This raises issues for the current policy emphasis on economic participation through employment and the range of personal as well as educational supports that are yet to be forthcoming in enabling such a transition. Interaction with the criminal justice system has an impact on the transition from unemployment to employment.

Incarceration rates for Indigenous people have increased by 28% since 1991. Incarceration rates for Indigenous women have increased by over 250% during the same period (Jonas 2003). Nearly 75% of all Indigenous prisoners have previously been imprisoned, highlighting quite extreme recidivism rates. Furthermore, there is a direct link between the age of first coming into contact with the criminal justice system (including juvenile courts) and the likelihood of repeat incarceration; for example, over 54% of those first charged prior to the age of 17 have been arrested or incarcerated since. The current law-and-order platform that underpins Indigenous policy implementation, while important in protecting the rights and safety of Indigenous women and children in particular, may further exacerbate Indigenous incarceration rates and affect the impact of investments in capacity development and transition-to-employment initiatives, just as a lack of investment in these areas increases the likelihood of incarceration.

As noted by Boughton and Durnan (2004, p.62) Indigenous people's participation in education is lower than non-Indigenous people in every sector, apart from VET, where overall participation rates are higher. According to NCVER's Students and Courses data (NCVER National VET Provider Collection 2005), Indigenous students from very remote areas of Australia make up 44% of the VET student population in those areas. By contrast, Indigenous people make up less than 20% of the overall population in the same areas (ABS 2003c). This represents an extremely high participation rate that to date has not translated into improved labour force participation or economic wellbeing.

## VET across the desert

Table 3 shows Indigenous participation in VET within 'remote' and 'very remote' categories of the Accessibility/Remoteness Index of Australia, for each of the desert jurisdictions. Over the four-year period, 2001 to 2005, the data show a modest increase of just over 10%. This compares with an overall decline in VET participation among all students in corresponding jurisdictions, of about 3%. The overall increase in participation is broadly consistent with high growth rates in the population of the 19–24 years age group which, according to estimates for 2001–09, will be greater than for any other age group in Australia (ABS 2004a).

Table 3 Remote and very remote Indigenous students (based on ARIA)<sup>1, 2</sup>

Remote and very remote	NSW '000	QLD '000	SA '000	WA '000	NT '000	Total '000
2001	2.1	3.7	0.9	3.8	6.1	16.6
2002	2.3	4.0	0.9	3.8	6.9	17.9
2003	2.5	4.2	0.9	4.0	6.0	17.6
2004	2.1	3.8	0.7	4.4	5.0 <sup>3</sup>	16.0 <sup>1</sup>
2005	2.4	3.8	0.8	4.7	6.7	18.4
Percentage chang	ge for period					
2001–05	14.3%	0.0%	-11.1%	23.7%	9.8%	10.8%
2003-04	-16.0%	-9.5%	-22.2%	10.0%	-17.0%	-9.1%
2004–05	14.3%	2.7%	14.3%	6.5%	34.0%	15.0%

Notes: 1 Data in this table have been aggregated from rounded data. As a consequence, there may be some rounding errors in the data.

Source: NCVER National VET Provider Collection, 2005

Table 4 summarises data drawn from the same data set as table 3 but shows only data for desert locations in each jurisdiction. The overall results in the two tables are broadly consistent with each other for the 2003–04 period, allowing for the smaller sample size of the desert data set, with the exception of the Northern Territory, where data were reportedly affected by an undercount. Regardless of the undercount, the fluctuations in the numbers across the desert region show the fragility of vocational training across the region. The factors of vulnerability described in the previous section serve to underpin that fragility.

<sup>2</sup> Data for this table have not been updated to reflect changes that have been made to the NCVER time-series data since the time of obtaining the data.

<sup>3</sup> In 2004 there was an under-reporting of Indigenous students in the Northern Territory. Of the 296 300 students nationally with an unknown Indigenous status in 2004, around 1000 students have subsequently been identified in the Northern Territory as Indigenous students. This publication has not been updated to reflect this change.

Table 4 Indigenous participation in VET by jurisdiction (based on desert statistical local areas)

Desert region subset	NSW	QLD	SA	WA	NT	Total
2003 count	283	53	825	1 515	1 966	6 645
2004 count	170	151	625	1 489	11 921²	3 491 <sup>1</sup>
2003–04 change	-39.9%	-71.7% <sup>1</sup>	-24.2%	-1.7%	-39.4% <sup>1</sup>	-47.5% <sup>1</sup>

Notes: 1 Author estimate due to NCVER confidentialised data.

Source: NCVER National VET Provider Collection (unpublished statistics)

Table 5 shows changes in unemployment rates for the period of this research project. For most jurisdictions there have been declines in unemployment exceeding the national average. However, for the Northern Territory the level of unemployment increased by more than 50% for the year to March 2006. The two-year change varied from around 45% in Alice Springs statistical local areas to up to 117% in Tennant Creek. While it might be reasonable to expect some volatility in the figures, the extent of the deviation from the national trend is notable for all but the New South Wales statistical local areas. In the case of Queensland, Western Australian and South Australian data, the extent of the negative trend is consistent with reported labour shortages in rural and remote areas, particularly those associated with mining and health (Department of Employment and Workplace Relations 2006a).

Table 5 Changes in unemployment (Indigenous and non-Indigenous persons) in desert statistical local areas by jurisdiction

Desert statistical local areas by jurisdiction	Change in unsmoothed unemployment, March 2004— March 2006 (%)	Change in unsmoothed unemployment, March 2005– March 2006 (%)	
New South Wales	-8.4	-11.7	
Queensland	-29.1	-39.2	
South Australia	-23.9	-51.1	
Western Australia	-20.7	-33.2	
Northern Territory	35.7	50.9	
All desert statistical local areas	-7.8	-5.2	
Australia	-5.4	2.7	

Sources: Department of Employment and Workplace Relations (2004, 2005, 2006b)

The Northern Territory picture, which reflects higher proportions of Indigenous people, is mirrored in national Indigenous labour force statistics (ABS 2007), which show declining trends in employment and labour force participation. Table 6 shows that remote area Indigenous employment and labour force participation have declined by 5% over the five-year period.

<sup>2</sup> In 2004 there was an under-reporting of Indigenous students in the Northern Territory. Of the 296 300 students nationally with an unknown Indigenous status in 2004, around 1000 students have subsequently been identified in the Northern Territory as Indigenous students. This publication has not been updated to reflect this change.

Table 6 Indigenous labour force data, Australia 2002–06 (remote areas, Indigenous people aged 15 and over)

Remote areas	Total Indigenous people employed '000 persons	Total Indigenous people unemployed '000 persons	Indigenous people: labour force '000 persons	Indigenous people: not in labour force '000 persons	Participation rate (percentage of Indigenous labour force in 15+ population)
2002	44.5	4.2	48.7	28.7	62.9%
2003	41.4	3.6	45.0	35.5	55.9%
2004	36.8	3.9	40.7	39.7	50.6%
2005	36.9	5.2	42.0	43.4	49.2%
2006	42.2	4.0	46.2	40.5	53.3%
Per cent change	-5.2%	-4.8%	-5.1%	41.1%	-9.6%

Source: ABS (2007)

Drawing the threads of the above data together, some important observations can be made. First participation in VET in remote Australia and more specifically in the desert region fluctuates from year to year and in the longer term is growing at a rate faster than the national average, but at a rate which is broadly consistent with the growth in the population of younger people most likely to participate. Second, the mainstream labour market in most desert areas is showing the signs of skills shortages; that is, unemployment is declining at a faster rate than the national average. Third, however, while the pool of available Indigenous labour is increasing (represented partly by the 41% increase in those not in the labour force), the proportion of Indigenous people in the labour market has declined by about 10% in remote areas of Australia over the four years to 2006. By contrast the participation rate in the Australian population as a whole increased from 63.3% in June 2002, to 64.6% in June 2006 (ABS 2006c). The combination of these data therefore raises questions about the purpose and fit of the training that Indigenous people are undertaking in the desert region.

### Indigenous participation in ACE

Across the desert 21.8% of Indigenous participation in VET is in multifield education programs—literacy, numeracy and communication. Under the definition of ACE as it is applied in most desert jurisdictions, a large proportion of Indigenous desert participation in VET could be considered ACE participation, particularly given the absence of any formal ACE sector in the desert jurisdictions of the Northern Territory and Western Australia where most Indigenous people are located. Indigenous desert people are accessing types of VET courses that are arguably more ACE than VET, have a more personal enrichment focus and are more able to be adapted to cultural and lifestyle contexts than the more mainstream vocational courses. Not only are mainstream vocational opportunities very limited across the desert, but the types of social and economic participation being actively chosen by Indigenous desert people do not necessarily 'fit' with the opportunities available through mainstream VET offerings. Boughton and Durnan (2004, p.66) have alluded to this mismatch as stemming from equity models that are based on inequalities between the assumedly homogenous Indigenous and non-Indigenous populations of Australia rather than a considered understanding of choices actively being made by Indigenous people about the type of learning that fits both context and aspirations.

It should be noted first that ACE as a sector does not technically exist in the Australian desert region in the same way that there is an institutionalised VET structure. However, ACE has been endorsed nationally by state, territory and Commonwealth ministers through the Ministerial Council on Education, Employment, Training and Youth Affairs in its 2002 Declaration, which strongly emphasises community ownership and the importance of the ACE sector as a pathway to further education and training (Ministerial Council on Education, Employment, Training and

Youth Affairs & Curriculum Corporation 2002) and as a significant contributor within the continuum of education and training provision in Australia, alongside VET, higher education and the school system. The research literature provides compelling evidence that adult and community education contributes significantly to the lives of individuals and communities (for example, Birch et al. 2003; Clemans, Hartley & Macrae 2003; Centre for Research and Learning in Regional Australia 2001), and that ACE contributes, albeit indirectly, to the economic life of regions by providing foundational skills such as language, literacy and numeracy skills, information technology, first aid and emergency services. Rather than think of ACE in terms of a formalised 'sector', it may be more helpful to consider a distinction between the types of learnings that occur within communities and organisations. If the VET sector is associated with 'formal' approaches to learning, then ACE can be viewed in terms of 'non-formal' learnings. Often these types of learnings are complementary. That is, one is needed to maximise the effectiveness of the other.

Much of the learning that happens in the desert region among Indigenous people is a mixture of both formal and non-formal training. Until recently much of this training formed part of Community Development Employment Projects scheme arrangements. The progressive removal of the scheme raises questions about the future of these learning programs. However, some examples of learning programs used in a variety of remote Indigenous contexts are given to illustrate the kind of educational activities that are likely to occur.

- ❖ The Ngaanyatjarra Pitjantjatjara Yankunytjatjara Women's Council (NPYWC), as part of its Mai Wiru Regional Stores Policy is implementing a range of activities as part of a broader community nutrition education program (Nganampa Health Council 2005).
- ❖ Apart from the Newmont mining case study cited later in this report (see also Fowler 2005a), there are several examples (for example, Holcombe 2006; Dixon & McKenzie 2005) of ways that Indigenous land use agreements have been used to facilitate a range of formal and nonformal learning activities that lead to employment in mainstream jobs, as well as providing essential pre-employment and personal development skills (including English language skills).
- ❖ Land management is increasingly significant for Indigenous communities in Australia, particularly with the rise of Native Title determinations and land use agreements. Training for these purposes is often well outside the mainstream of VET and typically merge Indigenous knowledge systems with mainstream education and training. Examples from remote Australia include the Djelk Rangers Program (Cochrane 2005), Caring for Country programs (Altman & Whitehead 2003), and biodiversity programs (for example, Stoll, Barnes & Fowler 2005).
- ❖ Learning also plays a big part in the development of health programs in remote Australia. For example, organisations such as the Central Australian Remote Health Development Services provide a range of learning opportunities for Aboriginal Health Workers, which are effectively a combination of formal and non-formal programs (Collier 2005; Guenther et al. 2006). Kral and Falk's (2004) report on a Central Australian Indigenous community's quest to implement a culturally appropriate form of health training delivery demonstrates the important contribution learning makes to a community's capacity in 'a model that integrates the training and employment of local Indigenous people into a process of strengthening community capacity' (p.7).
- ❖ In response to issues of child abuse and family violence in Central Australian communities several initiatives are using an array of tools and strategies, many of which include a mix of formal and non-formal programs, both as part of a response to community education and professional development of workers. While many of these programs are new and are yet to be evaluated or documented, there is broad acknowledgement of the need for capacity-building at a variety of levels to facilitate the behavioural changes needed (Learning Research Group & Department of Chief Minister 2006).
- Other education and capacity-building activities are being sponsored on remote communities by Oxfam, World Vision (for example, World Vision 2006) and by the Australian Government in the areas of land care, heritage and environment (for example, Environment Protection and Heritage Council 2003), information and communication technologies, sport and recreation and family and community programs such as the Partnership Outreach Education Model Pilots

(Department of Education, Science and Training 2004), the Stronger Families, Stronger Communities, Reconnect and Fixing Houses for Better Health (for example, Department of Family and Community Services 2003a, 2003b). Local and state government agencies are also involved in training, particularly in the areas of governance (for example, Northern Territory Government 2003; Office of the Registrar of Aboriginal Corporations 2005) and again these are a blend of enabling and accredited courses.

This plethora of learning activity represents the 'underbelly' of education efforts across the desert. Its extent is difficult to ascertain, given that it goes largely unreported unless evaluated by individual organisations or government departments. The range of offerings is often ad hoc and usually dependent on one-off funding. The prominence of learning in programs initiated beyond the formal education sectors could be seen as a response to the systemic neglect of education access for Indigenous people residing in communities across the desert. The focus of many of these activities is working with local people around local issues and opportunities. Thus the World Vision Program at Papunya is facilitating education programs dealing with petrol sniffing, contraceptive and sexual health, integrating Indigenous and western health knowledge (World Vision 2006), and the Department of Communications, Information Technology and the Arts is facilitating a range of skill and information communication technology infrastructure projects through its Backing Indigenous Ability initiative (Department of Communications, Information Technology and the Arts 2006).

It is possible that these learning programs are fulfilling the enabling and community development role usually ascribed to the ACE sector, although without the legitimacy and financial security this sector experiences in New South Wales and Victoria. Indeed the role such activities are fulfilling would appear to be grounded in harnessing existing and new skills towards community building and embracing cultural contributions—the very type of connection that seems difficult to embrace in vocational programs.

## Practitioner perspectives

### The people

During stage two of the project, practitioner perspectives were gathered during an eight-week structured online forum (between May and July 2005) hosted on the Desert Knowledge Cooperative Research Centre website. The aim of this stage of the project was to further build on existing networks of people working in similar places and contexts by offering them an opportunity to participate in a web-based forum to explore successes, concerns, highlights and frustrations, and provide them with ideas, resources, and maybe even some answers. Invitations were sent out to 191 identified people but only a cohort of 13 actively participated in the forum. Discussion papers were posted at the beginning of each week to stimulate conversation.

#### The issues

The most frequently raised issues in the forum were culture, training packages, teaching and technology, and capacity-building, enterprise development and employment. A summary of these issues and their implications is outlined below.

#### Culture

Forum participants identified three key issues relating to culture.

- ♦ Misunderstandings can potentially occur when communicating across language and sociocultural differences. Adapting to differing learning contexts takes both time and effort for teachers and learners alike.
- ♦ Cultural and family obligations influence learning and flexibility in training delivery. Accommodating these can result in difficulties in implementation.
- ♦ The values, norms and structures of relationships within Indigenous cultures cannot just be 'put aside' in order to assume the mantle of western values, norms and ways of relating.

#### Training packages, teaching and technology

Four key issues were identified is these areas.

- ♦ Limited English literacy and numeracy skills coupled with the inadequacy of nominal hours allocated to competencies are significant barriers to learning.
- ❖ Preferred learning styles and effective assessment processes for Indigenous learners, especially those whose first language is not English, have not been incorporated into training package development or use.
- ♦ Skilled teachers who are able to build strong relationships with learners, their families and their community, and who are able to develop linguistically and culturally appropriate learning resources are most important.

♦ Information technologies have potential but are problematic in terms of accessing them, using them and keeping them functioning. English literacy and numeracy issues and limited useful content means online learning will at best supplement face-to-face learning.

## Capacity-building, enterprise development and employment

Participants identified four issues relating to these areas.

- ♦ Building community capacity requires long-term plans and long-term investment in skills development and employment opportunities.
- ♦ Opportunities to deliver programs not aligned with national training packages are limited. Trainready and work-ready needs, usually enabled through second-chance learning like adult and community education programs are not generally available.
- ♦ There are work and enterprise opportunities available but they require different types of human and financial investment than are available. The mining industry offers a prime work opportunity but the training needs to be supplemented by a range of supports and a degree of intensity not standard in VET delivery models.
- ♦ Work as interpreters, translators and in niche areas, such as land and biodiversity management, has been identified. Diverting the necessary resourcing into these areas is difficult.

## **Implications**

The issues raised in the forum are not new. Indeed they have been documented in many reports and are the topic of numerous consultations (Charles Darwin University & Northern Territory Department of Employment, Education and Training 2004; Northern Territory Department of Education 1999). What is perhaps most disturbing is that movement through the issues has been so difficult. No doubt the extent of in-out migration of non-Indigenous people across the desert region (Taylor 2002a) and the corresponding issues of staff retention make difficult the sustainability of effective educational initiatives. In terms of working at the cultural interface, the constant inflow of new and often inexperienced staff means induction to different cultural landscapes is repeated often, but does not necessarily translate to improved practice. Processes for sustaining good and effective practice in the face of these realities are required.

Australia's national system of training has engendered significant advantages in terms of improved quality and consistent accreditation. Increased standards and regulatory requirements have reduced flexibility and innovation and this is most obvious in the context of unique learner needs and work opportunities. Flexibility is most often interpreted as that enabled through information and communication technologies and such flexibility is particularly problematic across desert regions. Ongoing English literacy and numeracy issues, learner preferences for side-by-side learning and the need for linguistically and culturally appropriate resources are difficult to address in current delivery and resource frameworks. Furthermore, the mainstream work focus of training package competencies sits uneasily with the range of work and livelihood options emerging across the desert, at the cultural interface and emanating from connections to land and culture. The deployment of education and training models that bridge the gap between prior knowledge and skill and work-related skills in both niche and mainstream fields is pressing. The community development and second-chance learning opportunities enabled through adult and community education programs (non-formal learning) may offer a means whereby the transition to being 'train ready' and indeed 'work ready' can be facilitated.

## Case studies

# Newmont Australia's Indigenous training and employment program

This case study describes the development of Newmont Australia's Indigenous training and employment program. The outcomes are a product of a partnership that has resulted in Indigenous people from remote communities being trained to a level where they can move into the permanent workforce, usually on a mine site. The case presents an industry/enterprise perspective on designing and delivering training programs for desert Indigenous people. The summary provided here briefly discusses some of the educational challenges and the factors that have contributed to its success. Interviews for the case study took place in the latter part of 2005.

#### Background

Newmont's Indigenous training and employment program grew out of a partnership that includes: the Newmont Mining Corporation (Newmont Tanami); the contractors to the mine, the Central Land Council, which represents the land interests of Indigenous people in the area; a training provider (Industry Services Training, Darwin); and a consultancy which provides coordination services (Central Desert Training Pty Ltd). It has been designed to assist traditional owners from the land on which the mine is situated to move into mainstream employment. Newmont Tanami's Indigenous training and employment program has been designed to target Indigenous people from Central Australian communities, including Alice Springs.

The program has undergone a series of changes since it was first introduced in 2001, as performance and feedback have been assessed. The training component of the program includes both accredited and non-accredited units designed to provide participants with skills that enable them to work safely in a range of areas on the mine site. The work placement component, which provides the opportunity for the participants to work in a minimum of three areas of the mine, allows them to make an informed decision about what type of work they want to do. Every graduate who wants a job is guaranteed a position.

About 12.5% of Newmont's Tanami operational workforce are Indigenous and are drawn from the Central Australian region (Fowler 2005b). This apparent success has not been without its struggles and is dependent on commitment and support from all contributing to the partnership.

#### Significance

Mining is the major economic driver for the desert region. It is the largest single employer for the region as a whole. However, based on 2001 census data, while mining employs about one in eight non-Indigenous people in the workforce, it employs only about one in 20 Indigenous people in the desert region (ABS 2002c). This program then at least goes part way to addressing that imbalance. The program also builds on an Indigenous land use agreement (Agreements Treaties and Negotiated Settlements 2006; Indigenous Support Services & ACIL Consulting 2001). While the agreement in itself may not be responsible for the program's outcomes, relationships have developed based on the shared understanding of the intent of the agreement. Incorporated within Newmont's own working ethos is an 'Australian Indigenous Peoples' Statement of Commitment',

which incorporates a series of underpinning value and action statements as part of a broader reconciliation agenda (Newmont Australia 2005). Meaningful partnerships with mutually beneficial outcomes are the result of this and form a working foundation for the training programs.

#### Lessons for VET

One of the key challenges for the program is bridging the gap between life in a remote Indigenous community and work at a gold mine. According to the Central Land Council: 'Education in remote communities remains the single greatest barrier to participation of Aboriginal people in the wider economy' (Ross 2004). Recruitment and selection processes have been designed to target prospective participants who will be able to complete the program to ensure as far as possible that they are 'not set up to fail'. Ensuring the success of the participants requires that they have English literacy levels at approximately Year 8 level so they can manage the safety issues associated with working on a mine site and are likely to have the capacity to complete the program successfully. This requirement provides a significant barrier to many of the people living in the communities near the mine as their literacy levels tend to be below that required for the program.

According to Newmont, the apparent success of the program is due to four fairly clearly defined factors. First, the local communities are involved with the mining company. The local people are familiar with the mine and many visit the mine site when travelling between Yuendumu and Lajamanu. Second, the program relies on the strength of several partnerships. These partnerships include Newmont Tanami Pty Ltd; the Central Land Council; the contractors who supply goods and services to Newmont Tanami Pty Ltd; Central Desert Training Pty Ltd, which provides the Coordinator; Industry Services Training, the training provider; and the Warlpiri communities. A third factor relates to the support given by the company. The actions of the company are consistent with its statement of commitment. The support extends from the corporate level to the local mine management and is reflected in both the financial commitment and management of the mine. For example, under the terms of the land use agreement, the company is required to provide crosscultural training to its staff. Fourthly, the program celebrates trainees' success. On completion of the program, a presentation night is organised and attended by all managers.

#### Conclusions

The Newmont Indigenous training and employment program is one example that shows how Indigenous land use agreements can be used to produce positive learning and employment outcomes for local Indigenous people. Of note is that Indigenous participation in employment within the mine has consistently been above 10% of the workforce over the last five years. This has allowed more Indigenous people from the Central Australian region to share in the most significant driver of the region's economy. The training component of the program has had to overcome several major barriers, including relatively low levels of English literacy and numeracy. Cultural awareness training has also been provided for non-Indigenous employees. Positive employment outcomes have, however, been realised, not primarily because of the training program as such, but as a result of the strength of the partnerships between Newmont, the Central Land Council and other stakeholders; the involvement of local communities; the sustained commitment of the company; and the perceived benefit derived by participants as they celebrate their learning successes.

## Waltja Tjutangku Palyapayi

This case study documents the journey of an Indigenous family organisation, Waltja Tjutangku Palyapayi (Waltja) in its work to develop the Training Nintiringtjaku initiative (knowing and speaking up for training). Training Nintiringtjaku is in essence a job-creation initiative. It seeks to establish employment opportunities for Aboriginal community training facilitators in remote communities in central Australia. It is thus a community-driven response to addressing the issues and barriers associated with training delivery, as experienced by registered training organisations,

and ensuring that the training provided is responsive to and inclusive of the needs and aspirations of participating individuals and communities. It stems from a community development approach to building the sustainability and future of remote communities and their residents and embraces economic participation as a core aspect of that development.

The purpose of this case study is to: explore the work of Waltja in compiling the evidence base underpinning the initiative and shaping of the role for Training Nintiringtjaku workers; and identify the opportunities and issues that arise in implementing an innovative approach to training access, particularly in relation to demand-and-supply factors. A series of focus group discussions and 'yarn times' (Rose forthcoming) were undertaken in both English and Indigenous languages with key staff and management members from Waltja. The training journey of an individual Waltja Management Committee member was also documented, providing both a rich exploration of issues in training delivery and the evidence base for a curriculum vitae and recognition of prior learning.

#### Background

Waltja Tjutangku Palyapayi Aboriginal Association is a community-based organisation working with Aboriginal families across an area of over 900 000 square km in central and northern Australia, with around 13 000 Indigenous people and with nine strong Indigenous languages spoken. Waltja operates across a suite of service areas, including children, youth, aged care and disability. It is also a registered training organisation offering training to its own staff and having a management committee. Many of the essential human services required on communities are overseen and enacted by voluntary committees and workers, with the paid positions usually filled by non-Indigenous people from elsewhere. Community members often get locked into volunteering without clear pathways or skills development towards the paid roles. Despite often years of work, the depth of their skills and knowledge remains unrecognised and unaccredited. Waltja has long articulated the need for local people to be supported and trained to assume existing work roles on their community and has argued that job-creation schemes are as critical as job-replacement or succession schemes (Waltja Tjutangku Palyapayi 2005). The Training Nintiringtjaku initiative seeks to create employment for local skilled people in: brokering training provision on their communities in need areas identified by community people; interpreting community languages in meetings with training organisations and during training sessions; providing assistance in aligning training to work roles on communities, especially in negotiating across the interface of cultures; supporting learners; and providing feedback to training organisations and the community.

Delivering in English and from mainstream training packages to learners whose English is limited and whose work contexts differ so extensively from what is assumed in standard courses is an ongoing challenge. Pressure to reduce enrolments in lower certificate levels, as well as an escalating range of regulations and standards, is shaping a culture of avoiding risk, such that remote delivery is precluded because of its high risk in terms of effective consultations, costs of travel and accommodation, and problems with attendance, retention and completions. Extant models for the supply of training are faltering, raising concern over the educational and employment futures of remote community residents.

#### Outcomes

In May 2004 the Training Nintiringtjaku project was endorsed by Waltja management committee, and project participants—those with strong English, strong language, seniority and good work skills—were nominated by Waltja members and community councils. Since then three support workshops for Training Nintiringtjaku workers have been run, aiming to develop and hone skills and identify training pathways for these workers themselves. Support has also been harnessed from the Reframing the Future Program, enabling partnerships to be developed between Waltja and other registered training organisations in relation to supporting the Training Nintiringtjaku initiative and customising training provision and recognition of prior learning processes in the Certificate IV in Training and Assessment. A number of Training Nintiringtjaku workers are currently progressing through units from this certificate.

Two registered training organisations have begun to employ Training Nintiringtjaku workers to help facilitate and deliver training on remote communities, while a further four have expressed interest, with a further eight community councils keen to support the work role of these people. Negotiations are underway with the Northern Territory Department of Employment, Education and Training regarding processes whereby training organisations can leverage additional funds to pay for Training Nintiringtjaku workers. The developing capacity of Training Nintiringtjaku workers is also being recognised across sectors, and a number have been or are being engaged as workers in research projects underway on their communities. Waltja has also been successful in leveraging substantial financial support from private enterprise to deploy computers and connectivity—and training in these—for Training Nintiringtjaku workers, thus supporting improved access to work opportunities.

#### Conclusions

The Training Nintiringtjaku initiative illustrates a grass roots response to addressing the opaque links between VET participation and employment opportunities in remote contexts and a collaborative problem-solving approach to addressing the barriers experienced in training delivery. This case study suggests what may need to be put in place to foster successful engagement and outcomes from VET. Informed demand at the local level or perseverance in undertaking training is not by itself sufficient to ensure that educational policies and practice at jurisdictional or national level address the needs and aspirations of desert Indigenous people. The disturbing decline in Indigenous VET participation across the desert in recent times underscores the need to scale up innovative and effective responses as a matter of urgency.

## Murdi Paaki: Training for healthier housing in remote New South Wales

This case study documents the story of the Murdi Paaki Healthy Housing Worker Pilot Project, initiated and managed by the Murdi Paaki Regional Housing Corporation (MPRHC). Training conducted under the project is designed to build the capacity of locally based Indigenous people, with a particular focus on environmental health and basic maintenance and construction skills. Batchelor Institute of Indigenous Tertiary Education is the training provider.

The purpose of this case study is: to investigate and report on the outcomes of training conducted for the Murdi Paaki Healthy Housing Worker program; and to consider the implications of the outcomes. 'Outcomes' to be considered are those impacting on the trainees, the Murdi Paaki organisation, the communities in which the trainees work, and other stakeholders identified. A total of nine formal interviews were conducted with ten representatives from Murdi Paaki Regional Housing Corporation (trainees and management); the Murdi Paaki Regional Assembly; New South Wales Greater Western Area Health Service (Population Health Unit); and Batchelor Institute of Indigenous Tertiary Education.

### Background

The Healthy Housing Worker Program was established following the recognition of the needs associated with Aboriginal housing in the then Aboriginal and Torres Strait Islander Commission region. In 1997 the Murdi Paaki Regional Housing Corporation managed four houses. Today, the corporation manages about 600 houses. The Healthy Housing Worker program currently operates in six communities in the region: Enngonia, Weilmoringle, Ivanhoe, Dareton, Gulargambone and Coonamble. Expansion of the program into three other communities is currently being considered. The program is consistent with the goals of the New South Wales Aboriginal Health Strategic Plan (New South Wales Health 1999) and a related strategy, Housing for Health (New South Wales Health 2006). However, it is the Australian Government's Maintaining Houses for Better Health (MHBH) program within the Fixing Houses for Better Health (FHBH) program with strategies

embedded in the *National Indigenous housing guide* (Department of Family and Community Services 2003b) that 'forms the front end of the HHW Pilot Project in the Murdi Paaki Region' (Murdi Paaki Regional Housing Corporation 2004, p.1).

The Healthy Housing Worker Program pilot extends and formalises this training under the management of Murdi Paaki Regional Housing Corporation so that workers can achieve formal environmental health qualifications. Units of competency are drawn from Certificate I in General Construction and Certificates II and III in Environmental Health (Batchelor Institute of Indigenous Tertiary Education 2006). Delivery is based on a combination of on-the-job learning and classroom training. Underpinning the skills taught is a framework of 'nine Healthy Living Practices' developed by HealthHabitat (1993, cited in Murdi Paaki Regional Housing Corporation 2004, p.2).

#### Outcomes

It is evident that the training has improved responsiveness to housing needs, thus producing a net benefit for the maintenance of housing stock. While it is too early to definitively say that housing stock longevity has been increased, there is a clear intent on the part of stakeholders to ensure that this occurs. The training has resulted in tangible outcomes for the trainees themselves, particularly in terms of their skills, which contribute directly to their employability. The trainees' increased confidence and self-esteem have contributed to their capacity to either be employed or—in the event that this is not possible within Murdi Paaki—to become self-employed or be more competitive in the mainstream labour market. Organisational outcomes are reported in terms of improved efficiency and responsiveness and improvements in management and administration. Community outcomes are described in terms of improved living conditions and improved social capital.

## Significance of the Healthy Housing Worker program

Many of the outcomes reported by respondents are common across training programs. These include: increased employability and confidence among trainees; improved skills and qualifications among participants; and improved organisational capacity for the employer. One would also expect that a training program aimed at improving healthy housing outcomes would achieve some results in this as well, and indications from all the respondents are that the program has done that. However, of note in this program are the outcomes related to 'the community'.

What is significant—and may warrant further investigation—is the reported impact the program is having on the community's relationship with Murdi Paaki Regional Housing Corporation and their 'ownership' of housing they occupy. While it is too early to assess the impact of the program on the longevity of housing stock managed by Murdi Paaki, it may well be that the improved relationship and that sense of ownership—along with the resulting increased community capacity—will do as much to contribute to housing maintenance as the skills imparted by the Healthy Housing Workers.

Also of interest is the link between education, housing and health. There would be considerable value in documenting and qualifying—if not quantifying—the impacts of environmental health training on the indicators of health within the community. Other studies have shown that the level of education attained by residents is an important factor associated with healthy housing practices (for example, Baile et al. 2005) and health more generally (ABS & Australian Institute of Health and Welfare 2005), but the link between the skills of environmental health workers and healthy housing practices has not been adequately explored. It was noted also that there has been something of a shift in emphasis towards housing maintenance in the program. The Murdi Paaki program adopts a regular 'survey and fix' approach to essential housing repairs which emulates, for example, the regular community executed healthy housing surveys utilised in the Northern Territory (Stewart et al. 2004). This approach ensures appropriate training is provided to locals to both undertake the surveys and initiate essential repairs, thus reducing the gap between problem identification and rectification.

#### Conclusions

The Murdi Paaki Healthy Housing Worker project has demonstrated a range of organisational, individual and community outcomes that model practically how training, employment, environmental health and community capacity more generally can be combined in a remote Indigenous community context. While it could be argued that the program is heavily dependent on financial support and a complex array of committed partnerships, the sustainability of the program is linked to a recognition of the long-term impact of: the skills and knowledge embedded within the communities; the reduced costs associated with importing those skills from outside the community; an increased sense of 'ownership' by residents who occupy the housing stock; and the improved relationship that exists between the housing organisation and the community, achieved through the Healthy Housing Workers.

#### DESART: Building on strengths—arts, cultures, futures

This case study explores issues of training, enterprise and employment in the Aboriginal arts industry of central Australia from the perspective of its peak advocacy body, DESART—the Association of Central Australian Aboriginal Art and Crafts Centres. This organisation currently resources, supports and advocates for 37 art centres across central Australia and across three jurisdictions—the Northern Territory, Western Australia and South Australia. The case study focuses specifically on two initiatives being undertaken by DESART: the Training Needs and Business Development Project and the Information Technology Training and Support initiative. One of the core visions of DESART is that of enhancing the business sustainability of art centres and supporting the ethical and effective expansion of the Aboriginal arts industry in central Australia. The skills and wellbeing of artists, the cultural practices that are the provenance of Aboriginal art, and the structure and efficacy of art centre work and governance are all part of DESART's remit and require a multi-faceted approach to building the capacity and viability of the sector.

The purpose of this case study is to: explore issues of training and capacity development from the perspective of an industry that represents the most pervasive and successful sector of desert Indigenous economic engagement; and examine the response of the training system to meeting the demands of the hybrid and intercultural work contexts represented by Aboriginal art centres. The case study entailed six in-depth interviews with DESART staff and art centre managers, observation of DESART executive meetings and access to a range of research and internal documents provided by DESART.

### Background

The Aboriginal visual arts industry is highly regarded, both nationally and internationally, with an estimated value of between \$100 and \$300 million. A significant proportion of this is generated from desert regions, particularly in the Northern Territory, and through Aboriginal art centres. There are an inflated number of Aboriginal artists relative to the Aboriginal population. This is probably because art often provides the only option for mainstream market engagement and earning income beyond welfare benefits. But art work also functions to preserve and promote traditional cultural practices and provides highly valued and contemporary mediums for the expression of those practices. Art practice thus straddles the interface between cultures and engages with the mainstream economic realm in a manner that reinforces the strength and value of the 'other'. Most artists, however, would receive on average around \$1400 per year for their work and only relatively few receive large sums of money. Art centres are generally supported through Australian Government funding, supplemented by industry support and occasionally, royalties. They are inevitably structured towards and function as social enterprises, wherein profits are returned for the benefit of artists and towards the ongoing development of that enterprise.

Art centres are sited on remote communities, often having only one employee, the manager, and are governed by a committee drawn from the membership, usually artists; they provide artistic,

social and cultural sustenance to artists and the community more generally. The small size and dispersed nature of art centres renders the role of their representative and advocacy organisation critically important, especially in fostering the suite of resourcing and supports required to further build the sustainability of the sector.

### Significance

The training needs research undertaken by DESART, in part supported through the Reframing the Future program, investigated the training and learning needs of the Aboriginal art industry (that is, artists and art centres) of central Australia. The research identified five key areas of training need: skills for art work; skills for the office; skills for art workers; working in the community; and working with galleries, culture centres and other outlets. These skills were then mapped against nine training packages. This process in a sense highlighted the mismatch between courses aligned to mainstream vocational occupations and the types of work undertaken and skills needed in remote community contexts. The research also identified key issues and barriers for access to and delivery of effective training for artists and art centre workers. These were: English literacy and numeracy skills; cross-cultural negotiation and mediation skills; issues with training content and delivery models; the need for flexible assessment and recognition of current competency approaches; the importance of non-formal, informal or on-the-job training; and the need for Indigenous people to have pathways into art centre work as well as professional development as artists.

DESART's business development project has prioritised supporting the employment of Indigenous art centre workers as a core strategy for building the sustainability of the art centre sector. This entails brokering partnerships across training providers and piloting innovative models of training delivery and assessment. It confronts issues related to the limited scope of courses available in desert regions and the inflexibility of current demand-based models delivering to industry. The project is also consolidating business and mentoring supports through the private sector and is involved in negotiations with the Department of Employment and Workplace Relations, which is supporting innovative models for workforce development. This is a work in progress, whose successes and failures offer key insights in building better futures for individual artists and the industry itself.

The Information Technology Training and Support initiative has expanded on an earlier project funded through the Networking the Nation program, which stemmed from the sale of Telstra. It has provided the framework for e-commerce activities by art centres—hardware, software, connectivity and websites—and currently delivers training and technical support to over 40 communities in central Australia. All training is non-formal and the project aims to incrementally build capacity across various sites within remote communities, including art centres. After six years in operation there are a number of key lessons forthcoming from the initiative. Firstly, eecommerce activities supplement and build on existing markets rather than generating new markets. Thus websites are only one of the tools required to build the sustainability of art centres. Secondly, models of technical support need to be quite different from those employed in larger urban centres where contractors are on hand when assistance is needed. Remote models must prioritise the handover of capacity and develop resources to support that handover. Thirdly, building local Indigenous people's capacity and work skills in computer technologies requires consideration of multiple access points on site in communities and the incorporation of computer-based tasks within the range of work tasks carried out. Lastly, the confidence and skills of non-Indigenous employees in communities in technical troubleshooting is a key indicator of whether local Indigenous people are enabled to access the technologies.

# Conclusion

The supply of VET services to Indigenous communities struggles to meet both expressed demand and relevance in desert contexts. While participation in VET is relatively high, this fluctuates from year to year; a significant reduction in participation was noted for 2004. These fluctuations demonstrate the vulnerability of the VET sector in the region; furthermore, Indigenous labour force participation in remote areas has declined over the past few years. The trend that appears to be emerging therefore is one of increased social and economic exclusion and decreasing pathways into work or study from participation in VET programs. The case studies highlight the difficulties experienced in accessing training, in shaping training to support pathways into existing work opportunities on communities, or developing training programs to align with emerging livelihood opportunities. These difficulties also reflect the inflexibility of an increasingly regulated training system in responding to local demand and aspirations and in negotiating the cultural, demographic and geographic landscapes across the desert.

The significant changes underway in Indigenous affairs and especially changes impacting on the Community Development Employment Projects scheme and the lifting of remote area exemptions for job search and other mutual obligation activities require urgent action to build the relevance and responsiveness of VET. While much of the policy associated with these changes focuses on aligning training effort with 'mainstream' work opportunities, the reality is that training needs to take heed of emerging local, as well as mainstream opportunities.

A number of delivery models fail to recognise the challenges faced by adult learners in the desert. For example, programs often require minimum numbers for viability and aim to train ten or more people in a field where there is perhaps one local job. They use training packages that need to be so customised to local contexts that the portability of that learning is compromised, and they depend on people's fluency in spoken and written English. It is not surprising that high participation rates are not fostering transition into work, enterprise or livelihoods opportunities across the desert.

Where some success is being realised, the delivery model embraces initiatives in which formal VET is just one aspect. As noted in the case studies, the development of partnerships that facilitate opportunities for formal, non-formal, informal and just-in-time learning, and on-the-job support and utilise local knowledge and skills, indicates the range of ingredients needed for success. VET offerings across the desert have their origin in the mainstream VET system. The 'one size will not fit all' approach endorsed in other areas of Indigenous affairs (Aboriginal and Torres Strait Islander Social Justice Commissioner 2003) could be used to negotiate the demand and supply of VET and other learning programs and supports, particularly if local Indigenous people are key players in the process. This would also necessitate identifying and creating local economic opportunities that align with local aspirations.

This research has uncovered some highly innovative approaches to delivery of VET at both a strategic and practice level. The Murdi Paaki case, for example, highlights the effective use of VET as a capacity-building tool, adding sustainability to service provision in remote communities in New South Wales. The DESART case shows how formal and non-formal training can be applied to an enterprise development context, providing skills and capacity for emerging entrepreneurs in an industry that adds both economic and cultural value to desert communities. The Newmont project showcases the possibilities of VET as tool to engage Indigenous people in rare mainstream employment opportunities in the desert. All the cases demonstrate the significant role that

partnerships play in these opportunities and highlight the long-term commitment of key stakeholders. This commitment reflects the determination of Indigenous and non-Indigenous people to capitalise on the inherent value of vocational learning, in order to maximise the opportunities that exist for Indigenous people scattered throughout the desert region.

The critical role of non-government organisations in brokering and nurturing a range of partnerships and networks in order to leverage more responsive, effective and outcome-focused training has been highlighted in this research. Unless such roles are recognised and supported, the sustainability of the initiatives underway will be compromised. Registered training organisations and government training authorities experience significant constraints in facilitating interventions that respond to local need—largely a consequence of their remit to focus on policy development or implementation and funding or accountability requirements. Such constraints are even more pronounced in contexts displaying a diversity of localities, people and geographies. Here therefore local people play a key role in ensuring effective and targeted training provision.

The research has also identified differences between jurisdictions across desert Indigenous communities, in terms of access to school education, infrastructure and facilities, and to formal post-compulsory learning opportunities. Desert regions of the Northern Territory fare worse in every area, and remote desert regions are more disadvantaged across a range of indicators than remote regions elsewhere.

In recent times there has been a heightened political and media focus on Indigenous Australians and in particular those living in remote areas. However, the complexities of Indigenous affairs and cultures and the overwhelming disadvantage experienced, coupled with dysfunction, means that there are no easy solutions. Surprisingly, emerging policy and implementation frameworks appear to take little note of the experiences of Indigenous people's advancement in other First World countries (Young 2006) or with the successful development approaches utilised in Third World countries (Aird 2006). The core platform of approaches in these contexts is participation that seeks to build capacity and responsibility in the users of services (Human Rights and Equal Opportunity Commission 2001). In a sense these approaches have sought to reduce 'hand out' frameworks, or indeed passive welfare approaches, by building local skills and knowledge for negotiating and making decisions on interventions that meet expressed demand and aspirations. Exploring the relevance of such development approaches to learning and training in remote Indigenous contexts would offer Australia's VET system a key opportunity to transform participation into impact.

VET provision for desert Indigenous communities straddles a community development and skill-building role, a role which is characterised by tensions that have to date rendered a great deal of VET training irrelevant to individual needs, local economies and livelihoods. In the absence of effective formal training, non-formal learning and capacity-building programs are entering the picture, but these are often ad hoc, flavour-of-the-month and short-term. The evidence outlined in this research stresses the critical importance of innovation, flexibility, sustainability and responsiveness to and inclusion of local demand and aspirations, especially through local organisations, in making a difference to desert people's lives and wellbeing.

The evidence begs a re-invention and re-alignment of VET services away from supplying pre-ordained delivery and content that leads to neither outputs in terms of relevant and usable qualifications nor pathways into 'work' activities. Positioning VET as part of a continuum of learning and development opportunities that together offer some hope of transforming lives and economies in desert regions is crucial. The value accorded to contemporary Aboriginal art and the emerging importance of managing the biodiversity and ecologies of desert landscapes offer both a place and perhaps a thriving future for desert people. Sustaining and developing these cultural, geographic and unique landscapes requires the creation of enterprise roles for local people. These are indeed the range of local skills ecosystems emerging across the desert and with the potential to transform health, wellbeing and futures for Indigenous desert people.

# References

- Aboriginal and Torres Strait Islander Social Justice Commissioner 2003, Submission to the Northern Territory Law Reform Committee Inquiry into Aboriginal Customary Law in the Northern Territory, viewed September 2006, <a href="http://www.hreoc.gov.au/Social\_Justice/customary\_law/nt\_lawreform.html">http://www.hreoc.gov.au/Social\_Justice/customary\_law/nt\_lawreform.html</a>>.
- ABS (Australian Bureau of Statistics) 2002a, Census of population and housing: Basic community profile, cat.no. 2001.0, ABS, Canberra.
- ——2002b, Housing and infrastructure in Aboriginal and Torres Strait Islander communities: Australia 2001, cat.no 4710.0, ABS, Canberra.
- ——2002c, Indigenous profile, cat.no.2002.0, ABS, Canberra.
- ——2003a, Expanded community profile, cat.no.2005.0, ABS, Canberra.
- ——2003b, Integrated regional data base 2003 (IRDB), Australia, cat.no.1353.0, ABS, Canberra.
- ——2003c, Population characteristics, Aboriginal and Torres Strait Islander Australians, 2001, cat.no.4713.0, ABS, Canberra.
- ——2003d, Time series profile, cat.no.2003.0, ABS, Canberra.
- ——2004a, Experimental estimates and projections, Aboriginal and Torres Strait Islander Australians, 1991 to 2009, cat.no.3238.0, ABS Canberra.
- ——2004b, National Aboriginal and Torres Strait Islander social survey 2002, cat.no.4714.0, ABS, Canberra.
- ——2005, Australian social trends, cat.no.4102.0, ABS, Canberra.
- ——2006a, Labour force characteristics of Aboriginal and Torres Strait Islander Australians, cat.no.6287.0, ABS, Canberra.
- ——2006b, Schools Australia, cat.no.4221.0, ABS, Canberra.
- ——2006c, Labour force Australia, detailed, September 2006, ABS, Canberra.
- ——2007, Labour force characteristics of Aboriginal and Torres Strait Islander Australians, ABS, Canberra.
- ABS & Australian Institute of Health and Welfare 2005, *The health and welfare of Australia's Aboriginal and Torres Strait Islander peoples, 2005*, cat.no.4704.0, AIHW cat.no.IHW14, ABS & AIHW, Canberra.
- Agreements Treaties and Negotiated Settlements 2006, Tanami Mining Agreements 1983, Agreements Database, Agreements, Treaties and Negotiated Settlements Project.
- Ah Kit, J 2003, 'Building stronger regions—stronger futures', statement at the launch of the Building Stronger Regions Stronger Futures Strategy, viewed December 2004, <a href="http://www.dcdsca.nt.gov.au/dcdsca/intranet.nsf/Files/LGRDministersspeeches/\spacesfile/14May03\_Ahkit.pdf">http://www.dcdsca.nt.gov.au/dcdsca/intranet.nsf/Files/LGRDministersspeeches/\spacesfile/14May03\_Ahkit.pdf</a>.
- Aird, W 2006, 'The way Brough can make his mark', The Australian, 9 August 2006.
- Altman, J 2003, 'Economic development and participation for remote Indigenous communities: Best practice: Evident barriers and innovative solutions in the hybrid economy', Ministerial Council for Aboriginal and Torres Strait Islander Affairs (MCATSIA), Sydney.
- ——2004, *Indigenous social policy and the new mainstreaming*, Centre for Aboriginal Economic Policy Research, Australian National University, Canberra, viewed October 2006, <a href="http://online.anu.edu.au/caepr/Publications/topical/Altman\_Mainstreaming.pdf">http://online.anu.edu.au/caepr/Publications/topical/Altman\_Mainstreaming.pdf</a>>.
- Altman, J & Gray, M 2000, The effects of the CDEP scheme on the economic status of Indigenous Australians: Some analyses using the 1996 census, Centre for Aboriginal Economic Policy Research, Australian National University, Canberra.
- Altman, J & Whitehead, P 2003, Caring for country and sustainable Indigenous development: Opportunities, constraints and innovation, CAEPR working paper no.20/2003, Centre for Aboriginal Economic Policy Research, Australian National University, Canberra.
- ANTA (Australian National Training Authority) 2000, Partners in a learning culture—national strategy, ANTA, Brisbane.
- ——2004, Partners in a learning culture: Blueprint for implementation mid-term review, final report, ANTA, Brisbane.
- Attwood, E 2006, 'No pay no works, a treaty for Ali Curung', Alice Springs News, 14 September 2006.
- Australian Association for the Study of Peak Oil and Gas 2005, Indigenous communities working group (Submission to the Senate enquiry on Australia's Future Oil supply and alternate transport fuels), ASPO-Australia, viewed September 2006, <a href="http://www.aph.gov.au/senate/committee/rrat\_ctte/oil\_supply/submissions/sub48.pdf">http://www.aph.gov.au/senate/committee/rrat\_ctte/oil\_supply/submissions/sub48.pdf</a>.
- Australian Council of Social Service 2003, Hidden unemployment in Australia, ACOSS, Strawberry Hills, NSW.

- Australian Institute of Health and Welfare 2006, Australia's health 2006, AIHW cat.no.AUS 73, AIHW, Canberra.
- Baile, R, Stevens, M, McDonald, E, Halpin, S, Brewster, D, Robinson, G & Guthridge, S 2005, 'Skin infection, housing and social circumstances in children living in remote Indigenous communities: Testing conceptual and methodological approaches', *BMC Public Health*, vol.5, no.128).
- Balding, B & Graham, B 2005, 'Home grown solutions for healthier homes: The Healthy Housing Worker program in far-west NSW', 8th National Rural Health Conference, Alice Springs, 10–13 March 2005.
- Batchelor Institute of Indigenous Tertiary Education 2006, Batchelor Institute course handbook 2006, BIITE, Batchelor, Northern Territory.
- Birch, E-R, Kenyon, P, Koshy, P & Wills-Johnson, N 2003, Exploring the social and economic impacts of adult and community education, NCVER, Adelaide.
- Boughton, B & Durnan, D 2004, 'Beyond equity? Indigenous people's rights and the national VET system', Equity in vocational education and training: Research readings, ed. K. Bowman, NCVER, Adelaide.
- Brennan, S 2006, 'Land rights changes need injection of common sense', The Age, 6 August 2006.
- Central Land Council 2005, *The Land Rights Act amendments: Cost outweighs benefits*, Central Land Council, Alice Springs, viewed September 2006, <a href="http://www.clc.org.au/media/releases/2005/land\_rights\_act\_changes.asp">http://www.clc.org.au/media/releases/2005/land\_rights\_act\_changes.asp</a>.
- Central Land Council 2006, Submission to the Backing Indigenous Ability program of the Department of Communications Information Technology and the Arts, Department of Communications Information Technology and the Arts, viewed September 2006, <a href="http://www.dcita.gov.au/\_\_data/assets/pdf\_file/40866/Central\_Land\_Council.pdf#search=%22Submission%20to%20the%20Backing%20Indigenous%20Ability%20program%22">http://www.dcita.gov.au/\_\_data/assets/pdf\_file/40866/Central\_Land\_Council.pdf#search=%22Submission%20to%20the%20Backing%20Indigenous%20Ability%20program%22>.
- Centre for Appropriate Technology 2002, 'How to get a telephone', Our Place, no.2.
- Centre for Research and Learning in Regional Australia 2001, Learning communities in education and training, vols.1 & 2, CRLRA, University of Tasmania, Launceston.
- Charles Darwin University & Northern Territory Department of Employment, Education and Training 2004, Report on future directions for secondary education in the Northern Territory, Charles Darwin University, Department of Employment, Education and Training, Darwin.
- Clemans, A, Hartley, R & Macrae, H 2003, ACE outcomes, NCVER, Adelaide.
- Cochrane, M 2005, *The Djelk Ranger Program: An outsider's perspective*, CAEPR working paper no.27/2005, Centre for Aboriginal Economic Policy Research, Australian National University, Canberra.
- Collier, P 2005, Report on an evaluation of Aboriginal Health Worker training delivered by Central Australian Remote Health Development Services Ltd, Alice Springs.
- Commonwealth Grants Commission 2006, Report on state revenue sharing relativities, 2006 update, Australian Government, viewed January 2007, <a href="http://www.cgc.gov.au">http://www.cgc.gov.au</a>.
- Commonwealth Scientific and Industrial Research Organisation 2005, *Australia's arid lands*, viewed September 2006, <a href="http://www.cazr.csiro.au/aridlands.htm">http://www.cazr.csiro.au/aridlands.htm</a>>.
- Department of Communications, Information Technology and the Arts 2006, *Backing Indigenous ability*, Department of Communications, Information Technology and the Arts, Canberra, viewed September 2006, <a href="http://www.dcita.gov.au/\_\_data/assets/pdf\_file/37996/BIA\_discussion\_paper\_approved.pdf">http://www.dcita.gov.au/\_\_data/assets/pdf\_file/37996/BIA\_discussion\_paper\_approved.pdf</a>.
- Department of Education, Science and Training 2004, The learnings from CATs and POEMs What can policy makers draw from both? Final report, DEST, Canberra.
- Department of Employment and Workplace Relations 2004, Small area labour markets Australia, March quarter 2004, DEWR, Canberra.
- ——2005, Small area labour markets Australia, March quarter 2005, DEWR, Canberra.
- ——2006a, CDEP guidelines, DEWR, viewed September 2006, <a href="http://www.workplace.gov.au/NR/rdonlyres/E1A8F8F4-FB7C-40B8-B7F4-F3B4DE1A0B7B/0/CDEPguidelines\_composite\_final.pdf">http://www.workplace.gov.au/NR/rdonlyres/E1A8F8F4-FB7C-40B8-B7F4-F3B4DE1A0B7B/0/CDEPguidelines\_composite\_final.pdf</a>.
- ——2006b, Community Development Employment Projects (CDEP) Programme, DEWR, viewed September 2006, <a href="http://www.workplace.gov.au/workplace/Category/SchemesInitiatives/IndigenousProgs/CommunityDevelopmentEmploymentProjectsCDEPProgramme">http://www.workplace.gov.au/workplace/Category/SchemesInitiatives/IndigenousProgs/CommunityDevelopmentEmploymentProjectsCDEPProgramme</a>.
- ——2006c, *Skills in demand, March 2006*, DEWR, Canberra. viewed September 2006, <a href="http://www.workplace.gov.au/NR/rdonlyres/BF83E4CC-1E8F-4630-95C7-D9F3A6108A9A/0/SkillsinDemandMarch2006.pdf">http://www.workplace.gov.au/NR/rdonlyres/BF83E4CC-1E8F-4630-95C7-D9F3A6108A9A/0/SkillsinDemandMarch2006.pdf</a>.
- ——2006d, Small area labour markets Australia, March quarter 2006, DEWR, Canberra.
- Department of Family and Community Services 2003a, *Building a better future: Indigenous housing to 2010*, FaCS, Canberra. viewed May 2004, <a href="http://www.facs.gov.au/internet/facsinternet.nsf/aboutfacs/programs/community-indig\_housing\_2010.htm">http://www.facs.gov.au/internet/facsinternet.nsf/aboutfacs/programs/community-indig\_housing\_2010.htm</a>>.
- ——2003b, National Indigenous housing guide, FaCS, Canberra.
- ——2003c, Statement of commitment to Aboriginal and Torres Strait Islander People: Indigenous business is everybody's business, FaCS, Canberra.

- Dixon, I & McKenzie, G 2005, 'Indigenous land use agreements in South Australia: A partnership for sustainable development', *People, places, prosperity*: Sustainable Development Conference, Alice Springs, 31 October–4 November.
- Dumbrell, T 2000, Measuring the outcomes of vocational education and training, NCVER, Adelaide.
- Environment Protection and Heritage Council 2003, Going places: Developing natural and cultural heritage tourism in Australia, issues paper for the Environment Protection and Heritage Council, Canberra.
- Foster, D, Mitchell, J, Ulrik, J & Williams, R 2005, *Population and mobility in the Town Camps of Alice Springs*, a report prepared by Tangentyere Council Research Unit, Desert Knowledge CRC, Alice Springs.
- Fowler, B 2005a, 'Employing local locals: The Tanami approach to increasing Indigenous employment', People, places, prosperity: Sustainable Development Conference, Alice Springs, 31 October – 4 November.
- ——2005b, 'Perspectives from the desert', 2nd Indigenous Economic Development Forum, Darwin, 25—26 May 2005.
- Golding, B & Pattison, S 2004, 'Inequity in Australian vocational education and training by location', Equity in vocational education and training: Research readings, ed. K. Bowman, NCVER, Adelaide.
- Guenther, J 2004, Relationship between vocational qualifications and community well-being in remote communities of the Northern Territory, Australia, Tropical Savannas Cooperative Research Centre, Darwin.
- Guenther, J & Falk, I 2003, Student flows: A review of trends in education in the Northern Territory, Learning Research Group, Charles Darwin University, Darwin.
- Guenther, J, Falk, I, Arnott, A, Lucardie, D & Spiers, H 2006, How can VET/ACE partnerships improve industry, community and individual socio-economic well-being?, NCVER, Adelaide.
- Guenther, J, Young, M, Boyle, A, Schaber, E & Richardson, J 2004, *Growing the desert: Effective educational pathways for remote Indigenous peoples—Stage one report*, Desert Knowledge CRC, Alice Springs and NCVER, Adelaide,
- ——2005, Growing the desert: Regional and educational profiles of the Australian desert and its Indigenous peoples—Stage one report, Desert Knowledge CRC and NCVER, Alice Springs and Adelaide.
- Haberkorn, G, Kelson, S, Tottenham, R & Magpamtay, C 2004, *Country matters: Social atlas of rural and regional Australia*, Bureau of Rural Sciences, Canberra.
- Holcombe, S 2006, Early Indigenous engagement with mining in the Pilbara: Lessons from a historical perspective, revised August 2006, Centre for Aboriginal Economic Policy Research, Australian National University, Canberra.
- Hughes, H & Warin, J 2005, A new deal for Aborigines and Torres Strait Islanders in remote communities, Centre for Independent Studies, St Leonards, NSW.
- Human Rights and Equal Opportunity Commission 2000, Emerging themes: National inquiry into rural and remote education, viewed January 2007, <a href="http://www.hreoc.gov.au/word/human\_rights/rural\_remote/emerging\_themes.doc">http://www.hreoc.gov.au/word/human\_rights/rural\_remote/emerging\_themes.doc</a>.
- ——2001, Review of the water report, Aboriginal and Torres Strait Islander Social Justice Commissioner and Acting Race Discrimination Commissioner, 2001, viewed September 2006, <a href="http://www.hreoc.gov.au/racial\_discrimination/water\_report">http://www.hreoc.gov.au/racial\_discrimination/water\_report</a>.
- Indigenous Support Services & ACIL Consulting 2001, Agreements between Mining Companies and Indigenous Communities.
- Johns, G 2006, Aboriginal education: remote schools and the real economy, Menzies Research Centre, Canberra.
- Jonas, W 2003, Press statement by Dr William Jonas, Aboriginal and Torres Strait Islander Social Justice Commissioner—*Social justice report 2002 and Native Title report 2002*, 20 March 2003, HREOC Offices, Sydney, viewed January 2007, <a href="http://www.humanrights.gov.au/speeches/social\_justice/sj\_nt\_reports\_03.html">http://www.humanrights.gov.au/speeches/social\_justice/sj\_nt\_reports\_03.html</a>>.
- Kral, I & Falk, I 2004, What is all that learning for? Indigenous adult literacy practices, training, community capacity and health, NCVER Adelaide.
- Learning Research Group & Department of Chief Minister 2006, Evaluation of the Northern Territory Government Domestic and Aboriginal Family Violence Strategies, Department of the Chief Minister, Learning Research Group, Charles Darwin University, Darwin.
- Martin, D 2006, Why the 'new direction' in federal Indigenous affairs policy is as likely to 'fail' as the old directions, viewed September 2006, <a href="http://online.anu.edu.au/caepr/Publications/topical/Martin\_Agency.pdf#search=%22Why%20the%20%E2%80%98new%20direction%E2%80%99%20in%20Federal%20Indigenous%20Affairs%20policy%20is%20as%20likely%20to%20%E2%80%98fail%E2%80%99%20as%20the%20old%20directions.%22>.
- McDermott, R, O'Dea, K, Rowley, K, Knight, S & Burgess, P 1998, 'Beneficial impact of the Homelands Movement on health outcomes in central Australian Aborigines', *Australian and New Zealand Journal of Public Healthpages*, vol. 22, no.66, pp.653–58.

- Ministerial Council on Education, Employment, Training and Youth Affairs 2003, *National report on schooling in Australia in 2003*, Department of Employment, viewed September 2006 from <a href="http://cms.curriculum.edu.au/anr2003/index.htm">http://cms.curriculum.edu.au/anr2003/index.htm</a>.
- Ministerial Council on Education, Employment, Training and Youth Affairs & Curriculum Corporation 2002, Ministerial declaration on adult community education, MCEETYA, Department of Education and Training, East Melbourne, viewed September 2006, <a href="http://www.mceetya.edu.au/verve/\_resources/ace\_declaration.pdf">http://www.mceetya.edu.au/verve/\_resources/ace\_declaration.pdf</a>>.
- Memmott, P, Long, S & Thomson, L 2006, *Indigenous mobility in rural and remote Australia*, Australian Housing and Urban Research Institute, Queensland Research Centre, viewed September 2006 <a href="http://www.ahuri.edu.au/publications/download/20260\_fr">http://www.ahuri.edu.au/publications/download/20260\_fr</a>.
- Memmott, P, Long, S, Bell, M, Taylor, J & Brown, D 2004, Between places: Indigenous mobility in remote and rural Australia, Australian Housing and Urban Research Institute, Queensland Research Centre, viewed September 2006 <a href="http://www.ahuri.edu.au/publications/download/20260\_pp">http://www.ahuri.edu.au/publications/download/20260\_pp</a>.
- Memmott, P & Moran, M 2001, *Indigenous settlements of Australia*, Department of the Environment and Heritage, viewed September 2006, <a href="http://www.deh.gov.au/soe/techpapers/Indigenous/">http://www.deh.gov.au/soe/techpapers/Indigenous/</a>>.
- Mitchell, J, Pearce, R, Stevens, S, Taylor, J & Warchivker, I 2005, Indigenous populations and resource flows in Central Australia: A social and economic baseline profile, Centre for Remote Health, Alice Springs, viewed September 2006, <a href="http://www.desertknowledge.com.au/file\_store/041A0142-FDC0-1400-967148C603B8D727.pdf#search=%22Indigenous%20populations%20and%20resource%20flows%20in%20%20Central%20Australia%3A%20a%20social%20and%20economic%20baseline%20profile%22>.
- Morton, S, Short, J & Barker, R 1995, Refugia for biological diversity in arid and semi-arid Australia, Department of Environment and Heritage, viewed December 2004, <a href="http://www.deh.gov.au/biodiversity/publications/series/paper4/index.html">http://www.deh.gov.au/biodiversity/publications/series/paper4/index.html</a>>.
- Murdi Paaki Regional Housing Corporation 2004, Murdi Paaki Healthy Housing Worker Pilot Project 2002–2007 Training Strategy, February 2004, MPRHC, Broken Hill.
- National Native Title Tribunal 2006, *State and territory A1 maps*, viewed September 2006, <a href="http://www.nntt.gov.au/publications/state\_maps.html">http://www.nntt.gov.au/publications/state\_maps.html</a>>.
- NCVER (National Centre for Vocational Education Research) 2005, Student Outcomes Survey 2005: Data tables, NCVER, Adelaide.
- New South Wales Health 1999, *Aboriginal Health Strategic Plan*, viewed January 2007, <a href="http://www.health.nsw.gov.au/public-health/ehb/aborig/index.html">http://www.health.nsw.gov.au/public-health/ehb/aborig/index.html</a>>.
- ——2006, Housing for health, viewed July 2006, <a href="http://www.health.nsw.gov.au/public-health/ehb/aborig/hfh.html">http://www.health.nsw.gov.au/public-health/ehb/aborig/hfh.html</a>>.
- Newmont Australia 2005, 'Australian Indigenous Peoples' Statement of Commitment', viewed September 2006, <a href="http://www.newmont.com/en/operations/australianz/social/community/statement/index.asp">http://www.newmont.com/en/operations/australianz/social/community/statement/index.asp</a>.
- Nganampa Health Council 2005, Mai Wiru Regional Stores Policy and associated regulations for the Anangu Pitjantjatjara Yankunytjatjara Lands, Nganampa Health Council and Ngaanyatjarra Pitjantjatjara Yankunytjatjara Women's Council.
- Northern Land Council 2003, 'An inclusive future is the challenge: Yunupingu', Northern Land Council.
- Northern Territory Council of Social Service 2004, Creating effective pathways to employment and training for the employment disadvantaged in the Northern Territory, Charles Darwin University Learning Research Group and Northern Territory Council of Social Service, Darwin.
- Northern Territory Department of Education 1999, Learning lessons—An independent review of Indigenous education in the Northern Territory, Northern Territory Department of Education, Darwin.
- Northern Territory Department of Employment, Education and Training 2005, *Annual report 2004–05*, NTDEET, Darwin, viewed September 2006, <a href="http://www.deet.nt.gov.au/corporate/annual\_report/2004-2005/">http://www.deet.nt.gov.au/corporate/annual\_report/2004-2005/</a>>.
- ——2006, Collaborative trial sites, viewed September 2006, <a href="http://www.betterschools.nt.gov.au/">http://www.betterschools.nt.gov.au/</a> Indigenous\_education/collaborative\_trial\_sites.shtml>.
- Northern Territory Government 2003, Building stronger regions, stronger futures, Department of Community Development, Sport and Cultural Affairs, Northern Territory Government, Darwin.
- Office of Indigenous Policy Coordination 2004, New arrangements in Indigenous affairs, Department of Immigration and Multicultural and Indigenous Affairs, viewed September 2006, <a href="http://www.oipc.gov.au/About\_OIPC/new\_arrangements.pdf#search=%22site%3Awww.oipc.gov.au%20new%20arrangements%22">http://www.oipc.gov.au/About\_OIPC/new\_arrangements.pdf#search=%22site%3Awww.oipc.gov.au%20new%20arrangements%22</a>.
- ——2005, Annual report on Indigenous affairs 2004–05, Department of Immigration and Multicultural and Indigenous Affairs, Canberra.
- ——2006, Questions and answers on land tenure reforms to the Northern Territory Aboriginal Land Rights Act, viewed February 2007, <a href="http://www.oipc.gov.au/ALRA\_Reforms/QA\_LandTenureReforms.asp">http://www.oipc.gov.au/ALRA\_Reforms/QA\_LandTenureReforms.asp</a>.

- Office of the Registrar of Aboriginal Corporations 2005, ORAC corporate plan 2005–2007, Office of the Registrar of Aboriginal Corporations, Canberra, viewed September 2006, <a href="http://www.orac.gov.au/publications/Corporate/Corporate-plan\_2005-07\_colour.pdf">http://www.orac.gov.au/publications/Corporate/Corporate-plan\_2005-07\_colour.pdf</a>.
- Oster, J 2006, 'Desart Business Development Project', Desart Inc., Alice Springs.
- Pearson, N 2001, 'On the human right to misery, mass incarceration and early death', Dr Charles Perkins Memorial Oration, viewed March 2004, <a href="http://www.capeyorkpartnerships.com/team/noelpearson/pdf/right-to-misery-25-10-01.pdf">http://www.capeyorkpartnerships.com/team/noelpearson/pdf/right-to-misery-25-10-01.pdf</a>.
- ——2004a, 'No danger of another stolen generation', The Australian, 5 November 2004.
- ——2004b, 'When welfare is a curse', The Age, 23 April 2004.
- ——2006, 'Funding for design of a "new deal" welfare reform pilot for Cape York,' media release, viewed September 2006, <a href="http://www.cyi.org.au/viewfile.aspx?article=DDJNLFDOQQ1C9VSDJ18Y8file=CYI%20Welfare%20Reform%20Pilot.pdf">http://www.cyi.org.au/viewfile.aspx?article=DDJNLFDOQQ1C9VSDJ18Y8file=CYI%20Welfare%20Reform%20Pilot.pdf</a>.
- Peterson, N 2004, 'Myths of the "walkabout": Movement in the Aboriginal domain', in *Population mobility and Indigenous Peoples in Australasia and North America*, eds JT and M Bell, Routledge, London, New York, pp.223–38.
- Rogan, L 2002, Community capacity building—what can it offer Australians who are disadvantaged and excluded?, viewed September 2006, <a href="http://www.dpc.wa.gov.au/psmd/policy\_network/Community%20Capacity%20-%20L%20Rogan.pdf#search=%22Community%20Capacity%20Building%20%E2%80%93%20What%20can%20it%20offer%20Australians%20who%20are%20disadvantaged%3F%22>.
- Rose, K forthcoming, The importance of capacity building for Indigenous governance, NCVER, Adelaide.
- Ross, D 2004, 'Beyond the partnership rhetoric: Aboriginal rights and realities', inaugural Global Sustainability Conference, 25–29 October 2004, Melbourne.
- Ross, K 1997, Population issues-Indigenous Australians, ABS, Canberra.
- Rowse, T 1998, White flour, white power: From rations to citizenship in Central Australia, Australian National University Press, Canberra.
- Shahidullah, M & Dunstan, K 2000, 'Draft experimental Aboriginal and Torres Strait Islander abridged life tables, Australia and states/territories, 1995–1997', ABS, Canberra.
- Shiel, F 2005, 'Aboriginal Town considers legal push', The Age, 17 June 2005.
- Steering Committee for the Review of Government Service Provision 2005, Overcoming Indigenous disadvantage: Key indicators 2005, Productivity Commission, Canberra.
- Stewart, A, Daly, C & Schobben, X 2004, 'The NT Indigenous Community Housing Survey: Progressing housing maintenance for better health and safety', *The Northern Territory Disease Control Bulletin*, vol.11, no.4, pp.1–5.
- Stoll, J, Barnes, R & Fowler, B 2005, 'The Tanami biodiversity strategy—Aboriginal and industry partnership in biodiversity conservation', *People, laces, prosperity:* Sustainable Development Conference, 31 October 4 November, Alice Springs.
- Sullivan, P 2005, Strange bedfellows: Whole-of-government policy: Shared responsibility agreements and implications for regional governance, CAEPR-Reconciliation ICG Project Workshop with Western Australian and Australian Government Partners, Perth.
- Taylor, J 2002a, Population futures and the Australian Desert: A framework for CRC research, Desert Knowledge Cooperative Research Centre Forum, Alice Springs, October 2002.
- ——2002b, *Population futures in the Australian Desert 2001–2016*, Centre for Aboriginal Economic Policy Research, Australian National University, Canberra.
- ——2003a, Indigenous economic futures in the Northern Territory: The demographic and socioeconomic background, Centre for Aboriginal Economic Policy Research, Australian National University, Canberra.
- ——2003b, *The spatial context of Indigenous service delivery*, Centre for Aboriginal Economic Policy Research: Australian National University, Canberra.
- ——2006, Population and diversity: Policy implications of emerging Indigenous demographic trends, Centre for Aboriginal Economic Policy Research, Australian National University, Canberra.
- Taylor, J & Bell, M 1999, *Changing places: Indigenous population movement in the 1990s*, Centre for Aboriginal Economic Policy Research, Australian National University, Canberra.
- Thomas, D, Condon, J, Anderson, I, Li, S, Halpin, S, Cunningham, J & Guthridge, S 2006, Long-term trends in Indigenous deaths from chronic diseases in the Northern Territory: A foot on the brake, a foot on the accelerator, viewed January 2006, <a href="http://www.mja.com.au/public/issues/185\_03\_070806/tho11083\_fm.html">http://www.mja.com.au/public/issues/185\_03\_070806/tho11083\_fm.html</a>>.
- Vanstone, A 2005, 'Address to National Press Club', Minister for Immigration and Multicultural and Indigenous Affairs.
- ----viewed September 2006, <a href="http://www.kooriweb.org/foley/news/vanstone1.html">http://www.kooriweb.org/foley/news/vanstone1.html</a>.
- Waltja Tjutangku Palyapai 2005, Helping people to help themselves: A study of training issues for Aboriginal women and their remote communities in Central Australia, Security4Women (S4W), viewed 29 October 2007, <a href="http://www.security4women.com/HelpingPeopletoHelpThemselves\_Waltjareport\_July05.pdf">http://www.security4women.com/HelpingPeopletoHelpThemselves\_Waltjareport\_July05.pdf</a>.

World Vision 2006, *Indigenous partnerships*, viewed September 2006, <a href="http://www.worldvision.com.au/getinvolved/Indigenouspartnerships/storiespics.asp">http://www.worldvision.com.au/getinvolved/Indigenouspartnerships/storiespics.asp</a>.

Young, M 2006, 'Revolution on Indian Country: Thoughts on the American way', Our Place, no.28.

Zubrick, S, Silburn, S, De Maio, J, Shepherd, C, Griffin, J, Dalby, R, Mitrou, F, Lawrence, D, Hayward, C,
Pearson, G, Milroy, H, Milroy, J & Cox, A 2006, The Western Australian Aboriginal Child Health Survey:

Improving the educational experiences of Aboriginal children and young people, University of Technology and
Telethon Institute for Child Health Research, Perth.

# Support document details

Additional information relating to this research is available in *Growing the desert: Educational pathways* for remote Indigenous people—Support document. It can be accessed from NCVER's website <a href="http://www.ncver.edu.au/publications/1911.html">http://www.ncver.edu.au/publications/1911.html</a> and contains:

- ♦ The Murdi Paaki Healthy Housing Worker program—replicable outcomes
- ♦ DESART—Building on strengths: Arts cultures, futures
- ♦ Waltja Tjutangku Palyapayi: Organisational and individual journeys
- ♦ Newmont Tanami Case Study



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