SUPPORT DOCUMENT

Examining learning partnerships in northern Australia: VET/ACE connections literature review—Support document

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This document was produced by the authors based on their research for the report *Examining learning partnerships in northern Australia?*, and is an added resource for further information. The report is available on NCVER's website: <http://www.ncver.edu.au >

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Introduction

The emphasis of the VET/ACE connections project is on the impact of and potential for collaboration and cooperation between Adult and Community Education (ACE) and Vocational Education and Training (VET), with a particular focus on outcomes that result from partnerships formed. This literature review considers the relevant research literature for the project. In particular the literature reviewed will consider definitional aspects related to the project, outcomes of VET and ACE, jurisdictional considerations and aspects of VET and ACE relating to partnerships. Specific reference is made to literature and data in relation to the three study sites of this research: the Bowen Basin, in central Queensland; Kakadu and Central Australia, both in the Northern Territory.

Definitions of ACE and VET: in context

The traditional views of ACE and VET are such that the former is seen to be informal, essentially non-institutional and for personal and community benefit, while the latter is considered to be more formal, institutional, accredited training with a vocational/employment outcome in mind. Boundaries between the two sectors, however, are becoming blurred. Birch et al. (2003), commenting on the ACE sector, state that:

> An increasing trend is the provision of distinctly vocational and accredited training, so-called VET ACE, which now accounts for half of reported ACE. (p. 44)

Brown's (2001) suggestion that there is an overlap rather than a divide among the various foci of learning is becoming applicable to ACE and VET: ACE is acquiring an increasingly vocational face, while the notion of VET as a distinct sector is blurring. An example of this is the phrase 'ACE VET', used to describe 'vocational learning (accredited or non-accredited) provided by an organisation set up to deliver adult and community education…' (Saunders 2001:18) 'VET's influence appears to be spreading through an increased diversity of providers, and through its colonisation of other training areas such as ACE, VET-in-Schools and adult literacy and numeracy' (Hawke, Kimberley & Melville 2002; Henry & Grundy 2004). A more integrated approach to planning is becoming seen as a necessary strategy for developing skills for the future (e.g., Government of South Australia 2003). The following sections explore the background and reality behind the distinction between ACE and VET.

ACE

ANTA (2005) defines ACE as 'intended principally for adults, including general, vocational, basic and community education, and recreation, leisure and personal enrichment programs'. It is thus a response to the lifelong learning needs of the community (Department of Education and Community Services ACT, 2005)—a fourth sector of education, with schools, higher education and VET being the other three. The defining characteristics of ACE include: easy access and flexible participation; consumer-driven and learner-centred classes and courses; a wide variety of learning in areas ranging from self-improvement, general education, leisure, personal and community development, employment skills and preparation for vocational education and training; and a second chance role (Golding, Davies & Volkoff 2001; Ministerial Council on

Education, Employment, Training and Youth Affairs 2002; Department of Education and Community Services ACT 2005). Many ACE providers offer vocational education and training both as non-formal and as accredited courses, with some ACE providers being Registered Training Organisations (Hawke et al. 2002). According to NCVER (2003), approximately three quarters of the nearly 21,000 hours delivered as ACE in 2001 were vocational in nature. ACE is therefore a significant part of the Australian Training System (NCVER 2001a; Commonwealth of Australia 2005). ACE training activity is characterised by a high proportion of successful outcomes (NCVER 2001a).

ACE is also an umbrella term for adult learning, delivered through a proliferation of diverse organisations such as evening and community colleges, Workers' Educational Associations, community adult education centres, adult migrant education centres, neighbourhood houses, churches, schools, TAFE institutes, universities (continuing education), and University of the Third Age (Knight & Nestor 2000), but with no national policy overseeing body. The institutional nature of much ACE delivery is to some extent being determined by funding processes and constraints, which have the capacity skew the nature of ACE organisations so they are distracted from their original purpose (Traynor 2004:9).

Funding and provision of ACE varies across all Australian states and territories. The situation in northern Australia reflects the national one: in the Northern Territory there is no recognised peak body for ACE; in Western Australia, Learning Centre Link is the state association for Community, Neighbourhood and Learning Centres. Meanwhile in Queensland the peak body is the Lifelong Learning Council Queensland, though several other organisations such as Learning Network Queensland have specific functions within the ACE sector. Nationally, Adult Learning Australia (ALA) acts as an advocacy organisation for the field of adult learning generally, though this is not specifically restricted to ACE.

However, ACE has been endorsed nationally by state, territory and Commonwealth Ministers through the Ministerial Council on Education, Employment, Training and Youth Affairs (Ministerial Council on Education, Employment, Training and Youth Affairs), in a 2002 Declaration strongly emphasising 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 2002), 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 (e.g. Birch et al. 2003, Clemans, Hartley & Macrae 2003; Centre for Research and Learning in Regional Australia 2001, 2002), 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.

The definition of ACE offered at the beginning of this section does not necessarily imply an institutional or organisational basis but the progressive shift toward an institutionalised understanding of adult education (e.g. as the 'fourth sector') runs contrary to much empirical evidence of adult and community education as non-formal, informal and non-institutional. Jarvis (1995, p.41) makes this distinction in his discussion of philosophies and concepts of adult education by defining it as 'any planned series of incidents, having a humanistic basis, directed towards the participants' learning and understanding'. Similarly, (Martin 1993, p.194) contends that 'community education should be about partnership and solidarity rather than paternalism or manipulation', which might be implied by an institutionalised framework of understanding of ACE. The concepts of 'lifelong learning', 'learning communities' and 'learning society' embody the apparently amorphous nature of adult and community education (Henderson et al. 2000). Given the ambiguity of the term 'adult and community education', the conclusion the researchers have come to in this project is that there is no such thing as institutional ACE as a distinct sector separate from VET. Rather, there is 'adult learning' and VET is a subset of this.

In light of the diversity of practices embraced by the term ACE, it seems most useful to use a framework that allows a mapping of the social (learning) practices involved. That is, instead of attempting definitions of ACE based on institutional preconceptions or policy intent, recognition of the role of ACE in its diversity is best gauged against a framework such as Clemans et al. (2003). In this way, a map of learning practices can emerge. Perhaps this is a possibility also in the case of VET, so as to demonstrate the diversity of VET learning practices.

VET

ANTA (n.d.) defines the role of vocational education and training (VET) as being to

> provide skills and knowledge for work, enhance employability and assist learning throughout life. In today's Australia, VET is offered not only in the public TAFE system, but also through private and community providers and in secondary schools. It can link to university study options, and provides up to six levels of nationally recognised qualifications in most industries.

The mission statement of the national VET system is 'to ensure that the skills of the Australian labour force are sufficient to support internationally competitive commerce and industry and to provide individuals with opportunities to optimise their potential' (ANTA 1998, Preface).

The publicly funded VET sector in Australia has burgeoned in the past decade, with participation in VET training increasing by 54 per cent during the 10 years to 2003 (Karmel 2004). VET in Schools courses—developed in the 1990s for secondary school students seeking more vocationally-oriented studies—are now integrated into Senior School Certificates (Henry & Grundy 2004).

Until 2005, the peak body overseeing VET was the Australian National Training Authority (ANTA). Now VET is administered out of the Department of Education, Science and Training (DEST). Government policy in relation to the role of VET, and strategies and initiatives to implement them, is played out differently across Australia (Hawke et al. 2002), but most state and territory governments have set in place strategic plans to deal with vocational training. Addressing specific current skills shortages (notably in child care, health, engineering and electrical sectors (Department of Employment and Workplace Relations 2004) is included in these (Department of Employment and Training 2002; Department of Training 2002; Department of Education 2004; Northern Territory Government 2003a).

There is a blurring of the boundaries between VET and ACE. In northern Australia, for example, much of what can be considered ACE delivery is funded under the guise of VET outcomes. In the Northern Territory, the Department of Employment Education and Training funds a variety of pre-employment programs under the Training for Remote Youth program with a mix of accredited and non-accredited training in partnership with communities (Northern Territory Department of Employment, Education and Training 2005). In Queensland, Learning Network Queensland, essentially an organisation committed to lifelong learning funded from state and Commonwealth government sources (Learning Network Queensland 2005), provides training in communities that often is designed to link communities with industries. As a result of recent policy changes, the core membership of the new Ministerial Council on Vocational Education is now essentially the same as that of the Ministerial Council on Education, Employment, Training and Youth Affairs (MCEETYA) (Commonwealth of Australia 2005). It is anticipated that this re-alignment will facilitate increased linkages between the two sectors.

Community capacity building

'Community' has diverse meanings, but here is defined in terms of place where people live (Guenther & Falk 2000), which may include other understandings of the term, such as having a shared identity (Cavaye 2004). The term 'community capacity' is sometimes 'bandied around' (House of Representatives Steering Committee on Aboriginal and Torres Strait Islander Affairs 2004, p.11) without explanation or definition. There is a lack of clarity in how one defines 'capacity'. Definitions of community capacity *building* in the literature usually involve a community's ability to engage—and the process of engaging—in action and collaborative participation (NSW Government 2003; Macadam et al. 2004) in order to draw on various social, natural, economic and human resources to manage change and sustain community-led development (Balatti & Falk 2000; Natural Resources and Environment 2001; Black & Hughes 2001). Community capacity building outcomes encompass a broad range of social, economic, and educational objectives, meeting the needs of industries, communities, organisations and individuals. The term is sometimes used interchangeably with 'community development' (Oxfam Community Aid Abroad 2002), though there are suggestions that 'capacity building' places more emphasis on collaboration and the community itself than on the agency of building (Houslow 2002).

The contribution of lifelong learning to community building appears to have only limited recognition in Australia (Kearns 2004). However the connection between ACE and VET and community capacity building is indicated in a number of strategy documents as the following example from Tasmania illustrates.

> ACE connects people within communities. Participants can access a broad range of pathways through and beyond ACE, all of which have the potential to improve social and economic outcomes for individuals, communities and for Tasmania as a whole.
> (Department of Education 2004, p.1)

The connection between the ideas of learning, capacity building and community development is as slippery as the terms themselves. Oxfam Community Aid Abroad (2002, p.3) state that:

> Capacity building is not just training and it is not simply about individual and collective skills development. Capacity building is about community development and is essentially a political process.

The Australian Capital Territory's policy on ACE includes the goal of integrating it 'with other strategies and programs (for example, national reconciliation, rural extension, environment and heritage, healthy ageing and active retirement etc)' (Department of Education and Community Services 2005), all of which link with community capacity building. Nationally, the Ministerial Council on Education, Employment, Training and Youth Affairs Declaration (2002, p.4) 'puts strong emphasis on achieving community capacity building through community ownership'.

ACE is believed to strengthen community bonds, 'particularly where people undertake recreational courses' (Birch et al. 2003 p.7), and to play an important role in regional and rural development, with many ACE providers being the only local post-compulsory education provider. In VET, the Australian National Training Authority's (ANTA) strategy for 2004–2010 includes specific mention of community benefit in its third objective: 'Communities and regions will be strengthened economically and socially through learning and employment' (ANTA 2003, p.2).

With regard to Indigenous community capacity building, ANTA's (2000a) national strategy for Indigenous vocational education and training includes objectives incorporating cultural inclusivity and lifelong learning (Catts & Gelade 2002). As VET opportunities in remote Indigenous communities should thus be made more accessible, it is envisaged that Indigenous people will gain the employment skills to ultimately take control of their communities. Kral and Falk (2004)

report on a Central Australian Indigenous community's quest to implement a culturally appropriate form of health training delivery encompassing physical well-being as well as an interrelationship between the social, emotional and cultural well-being of the community as a whole, in 'a model that integrates the training and employment of local Indigenous people into a process of strengthening community capacity' (p.7). Kral and Falk make the additional point that:

> The community's capacity in this context is represented by an amalgamation of the inherent strength of Indigenous law and culture, kinship relationships, governance structures, and education and training working effectively together. When all these elements are working effectively you have capacity. (p.48)

ACE and VET clearly have the potential to enhance community capacity building in northern Australia (Arnott 1997, 2000; Arnott & Benson 2001), but this potential has hitherto not been fully explored (Guenther 2004).

Outcomes of VET and ACE: evidence from Australia and internationally

Outcomes of VET and ACE may be wide ranging, although governments have tended to emphasise economic gains. Education's role in providing economic benefits to society is 'promoted by Australian governments in unequivocal terminology' (Henry & Grundy 2004:12). Education and training are widely believed to confer significant economic and non-economic advantages for the individual, the employment sector and society (O'Keefe, Crase & Maybery 2005). The literature in this section will consider the outcomes of VET and ACE under headings of community and social outcomes, employment outcomes and personal outcomes. The section will conclude with a consideration of outcomes frameworks.

Community and social outcomes

The literature makes frequent connection between learning and positive outcomes for communities and societies (Centre for Research and Learning in Regional Australia 2002; Kearns 2004; OECD 2001b)—through partnership forming and the sharing of resources (Centre for Research and Learning in Regional Australia 2001, 2002; Kilpatrick, Johns, Mulford, Falk & Prescott 2001), social capital building (Falk, Golding & Balatti 2000; Golding et al. 2001; Kilpatrick & Falk 2001), economic as well as other benefits (Birch et al. 2003), knowledge and identity development (Clemans et al. 2003) and in land management (Environment Australia 2002). Guenther (2005) believes one of the key foundations for effective outcomes in VET is commitment to longer term funding. Birch et al. (2003) claim that community and social outcomes are what distinguish ACE from mainstream VET, in that ACE outcomes generally confer social benefits on the individual and the community while VET outcomes contribute economic benefits.

Health outcomes

Education and training directly influence health outcomes through the provision of skilled health professionals and paraprofessionals. The health and community industry sector, a major employer in northern Australia, is being affected by nation-wide skills shortages for a wide range

of professions in that sector (Department of Employment and Workplace Relations 2004), particularly in rural and remote areas (Indigenous Nursing Education 2002). In the Northern Territory, the NT Department of Employment, Education and Training reports that '30% of the Health and Community Services sector's employees work in skill shortage areas' (2005, p.317). In the Indigenous health workforce, which has a vital role in providing primary health care and preventative education programs in the communities, shortages are described as 'critical' (NT Department of Employment, Education and Training 2005:309). Central Queensland is also reporting skills shortages in health (Central Queensland Regional Planning Advisory Committee 2002).

The issue of resources in health, as in education, is a significant one: distance covered by stretched infrastructure impacts on these in Indigenous communities of northern Australia, with many communities at a considerable distance from hospitals and schools (ABS 2002a). Kral and Falk (2004) note that while determining appropriate training methods for Indigenous workers in the health service remains an unresolved issue, the health service has begun to develop a 'culturally appropriate' model of community capacity that sees the relationship between community capacity and Indigenous law and culture as inextricably linked (p. 46).

Quite apart from the impact of formalised training on health service provision there is considerable evidence to suggest a link between learning and community health outcomes. This has been recognised internationally in terms of a link between adult learning and preventative health measures (Feinstein et al. 2003). Clemans et al. (2003), in a study of ACE outcomes, report a range of physical, mental and emotional well-being outcomes. Dawe (2004), discussing the outcomes of enabling courses, describes these benefits in terms of improved self-concept and self-esteem. While recognising that the link between health and education is two way, the recent ABS/Australian Institute of Health and Welfare (2005) publication, *The Health and Welfare of Australia's Aboriginal and Torres Strait Islander Peoples* states unambiguously that:

> International research has clearly established that higher levels of educational attainment are associated with better health outcomes… For example, studies on health transition in developing countries have shown that with the addition of one extra year of parental schooling, the infant mortality rate drops between 7% and 10%. (p. 22)

The OECD (2001), discussing the linkages between education and well-being concurs with this assessment:

> One of the clearest benefits of education is better health. Individuals with higher educational attainment have healthier habits and lifestyles. (p. 33)

Social cohesion

Putnam (2004a, 2004b) suggests that increased education results in increased social cohesion. This is supported by the work of Green, Preston and Sabates (2003), who found that social cohesion declined as educational inequity increased. Centre for Research and Learning in Regional Australia (2002) found that VET had the capacity to break down social divisions within communities because of the resulting bridging links built between diverse social groups. Building and linking networks in communities enhance social capital and so contribute to the cohesion of communities (Kearns 2004).

VET is associated with social capital (Falk & Kilpatrick 2000), which is widely seen as a key to community sustainability and long-term socio-economic success (Falk & Guenther 2000; Falk & Harrison 1998; Woolcock 1998). Many of the 10 regions researched as part of a 5 year program on VET in regional Australia by the Centre for Research and Learning in Regional Australia (2001) identify that the active presence of VET in a community results in improvements in social identification and cohesion, and increased capacity to contribute to community groups—all indicators of the presence of social capital. In a report on the *Adult Literacy and Life Skills Survey,*

the OECD (2005a) notes the important social dimension of adult learning for the 'knowledge economy':

> it is important to view adult learning not only as a means to enhance productivity and facilitate labour force participation, but also as a means to assist individuals in their everyday actions… and promote active citizenship… Adult literacy skills are critical for citizens to function in a learning society. (p. 84)

Environmental management

ANTA's (2003) *Shaping our future* strategic direction of VET document draws attention to 'environmental development and sustainability'. VET, used as a tool by LandCare groups and Green Corps, is used for ecological sustainability in regional Australia (Centre for Research and Learning in Regional Australia 2001; Schofield & Smale 2002; Macadam et al. 2004; Marika et al. 2004). The issue of learning for environmental management is particularly important for Indigenous communities and traditional land owners, who have an important role in managing large areas of environmentally sensitive land and sea environments. The northern Australian context includes several World Heritage listed national parks: Kakadu National Park, Purnululu National Park, the Riversleigh Fossil Mammal Site, Uluṟu-Kata Tjuṯa and the Great Barrier Reef. There is a growing recognition of the role that learning can play in regard to land management (Australian Broadcasting Corporation 2004; Cochrane 2005; Northern Land Council 2003; NT Government 2005; Storrs et al. 2003), but because 'caring for country' falls outside the definition of mainstream employment, the value of learning for this purpose is sometimes overlooked. Altman (2003:5), responding to this issue comments that:

> We need to move beyond thinking in terms of mainstream jobs, training, or Community Development Employment Project as a transition. Rather we need to afford people the dignity of recognizing their economic contributions.

Similarly, Altman and Whitehead (2003) conclude that:

> Aboriginal people are chronically under-represented in the mainstream workforce in northern Australia. This situation is contributing to severe social and human health problems. The biophysical health of the country is suffering as well, because too few people are actively intervening to deal with a daunting array of new and old problems. Aboriginal people are well equipped, through a remarkable existing skills base, demonstrable commitment, and location, to address both opportunities and challenges in achieving a new level of sustainable and equitable management of resources. (p. 7)

Employment outcomes

Employment outcomes for learnings are most often cited as benefits of vocational education and training and are increasingly used to justify funding of adult and community education programs. In this section employment outcomes are considered in terms of employment, productivity, and entrepreneurship, risk management, meeting the skills needs of industry and CDEP.

Employment, productivity and entrepreneurial outcomes

The literature indicates a relationship between learning and the nature of employment and employment status (ABS 2003a; Miller & Chiswick 1997; Robinson, 2001). Tunny (2004), analysing TAFE student employment outcomes, found that these might indicate that higher-level qualifications result in better employment outcomes. Birch et al. (2003) suggest that learning in the ACE sector helps people to engage with the workforce:

> Adult and community education can instill fundamental skills in disadvantaged sectors of the community, sometimes enabling participation in the workforce for the first time. (p. 29)

Industry sees VET as a way in which it is able to be competitive in global markets or to become more productive (OECD 2005a, 2005b). Blandy et al. (2001) in a study about the profitability payoffs of training in Australian business note that:

> The principal reason why training is profitable to firms is that it increases the productivity of their employees more than it raises their employees' wages and by a sufficient margin over a sufficiently long period of time to more than recoup the costs of providing the training. (p. 68)

The benefits of innovation are believed to be increased by training (Selby Smith et al. 2001) though VET or ACE are themselves not as directly associated with innovation as higher education (NSW Department of Employment and Training 2005). The Commonwealth's 2003 report on innovation, *Mapping Australian Science and Innovation* (Commonwealth of Australia 2003), devotes just two pages to VET and innovation. Curtain (2004:30), in considering TAFE involvement in innovation, commented that 'a search for other evidence of VET involvement with innovation showed meagre results'. Middleton (2005) suggests that research is not a valued activity in VET institutions. While ACE notionally is about community outcomes, according to NCVER (2003:5) approximately three-quarters of the nearly 21,000 hours delivered as ACE in 2001 were vocational in nature.

The ideas of entrepreneurship, leadership, innovation and management are sometimes placed in the same sentence and at the same time somehow related to training (e.g. Commonwealth of Australia 2003; Falk & Smith 2003). The connections between these concepts are however sometimes poorly explained. For example *Mapping Australian Science and Innovation* reports 'A shortage of entrepreneurial management skills' (Commonwealth of Australia 2003:240) without explaining what is meant by the term. Another example of this kind of confusion comes from the Western Australian Department of Training, which in a paper titled *Employment Directions—Employability Skills Framework* (WA Department of Employment and Training 2004, p.4) describes employability and entrepreneurship as effectively one and the same thing. Some attempts in the VET sector have been made to define competencies related to innovation and entrepreneurship but in reality the focus of the VET system has been more about 'incremental innovation and diffusion' (Pickersgill 2005, p.26) than about skills that produce entrepreneurs who are willing to take significant risks associated with entrepreneurial innovation.

Risk management

Innovation and risk management are sometimes seen to be at opposite ends of poles, such that innovation is associated with *taking* risks (leading) while risk management is about *controlling* risks (managing). Borgelt and Falk (2005) make an important distinction between leadership and management in the context of learning. They suggest that

> …it is crucial to create a knowledge workforce and knowledge capital which in turn minimizes risk exposure while at the same time creates a *status quo* that provides a secure and trusting environment for risk taking.

The VET system has traditionally been well placed to prepare a workforce by defining competencies that maintain the status quo—ensuring that workers conform to systems and regulations. To this end, Occupational Health and Safety training is included in all training packages (National Occupational Health and Safety Commission 2002, 2004). Part of the basis of this inclusion is the need to make workplaces safer, as evidenced by national workplace injury and disease statistics shown in Table 1. The human cost of 257 deaths and over 134,000 injuries as indicated by National Occupational Health and Safety Commission statistics (based on the direct costs of workers' compensation claims in Australia) is $7.5 billion annually. If indirect costs are included this rises to $34.3 billion or five per cent of Gross Domestic Product (National Occupational Health and Safety Commission 2004). The *National Occupational Health and Safety Commission Annual Report 2003–2004* shows that the industries with the highest incident rates for

fatalities, as a percentage of all incidents, are transport and storage, mining and agriculture, forestry and fishing. The latter two industry groups are particularly important for the northern Australian context.

Table 1.   Australian workplace injury and fatality statistics by industry, 2003

Industry of employment	Fatal injuries and diseases	Non-fatal injuries and diseases	Total injuries and diseases
Agriculture, forestry and fishing	22	5,459	5,481
Mining	12	1,755	1,763
Manufacturing	27	28,043	28,074
Electricity, gas and water supply	1	735	733
Construction	42	12,540	12,579
Wholesale trade	12	6,057	6,067
Retail trade	12	12,808	12,819
Accommodation, cafes and restaurants	4	6,550	6,549
Transport and storage	60	10,762	10,826
Communication services	3	1,342	1,339
Finance and insurance	2	1413	1421
Property and business services	17	9,943	9,959
Government administration and defence	15	5,445	5,461
Education	8	6917	6932
Health and community services	5	15,961	15,966
Cultural and recreational services	7	2,846	2,860
Personal and other services	8	5,512	5,515
Not stated	0	21	16
Total	257	134,109	134,360

Source: National Occupational Health and Safety Commission 2005

Meeting the skills needs of industry

Across northern Australia there is a shortage of skilled labour and expensive fly-in/fly-out strategies are increasingly used to supply skilled labour in many remote communities, particularly in the mining industry (Woolcock, Renton & Cavaye 2003) and the health industry (Greenwood & Cheers 2002). Some attempts have been initiated to upskill local people, including Indigenous people (Eddington 2003) with the operationalisation of 'skills eco-systems' through 'Skills Formation Networks' (Eddington 2005). The idea of skills eco-systems is being promoted nationally through a program called *skillecosytem.net*. NSW Department of Employment and Training (2005b) describes the approach in the following terms:

> The skill ecosystem approach is concerned with the broad challenges to workforce development and innovation in a particular industry, regional or local context. In the demonstration projects, VET providers work in a partnership or network setting with a wide range of stakeholders, including industry representatives and regulatory bodies, to identify solutions to business challenges. Active learning then takes place as one or more strategies (which include, but go beyond, skill formation) are trialled.

In its broadest form, a skills ecosystem may include extensive partnerships with an array of industry, community, government and training stakeholders (Loble & Williams 2004; Smith 2005). In northern Australia there are examples of partnerships between industry and Indigenous peoples that are stimulating training and employment opportunities (Northern Land Council 2003a). The Territory Construction Association / Northern Land Council /ADRail partnership is one example where the pressing employment needs of industry have been addressed (Northern Land Council 2003b). The model is being replicated for other major projects such as the Wickham Point gas project (Stirling 2003b). The skills ecosystem concept generally, and the

Northern Land Council/Territory Construction Association partnership specifically, demonstrate how innovative approaches to skills formation can be applied outside a skills deficit model addressed through traditional training structures to meet skills needs of industry. Because of the broad range of skills needed, inevitably the scope of these eco-systems will include learning that could be classified as ACE.

Another example of this kind of partnership approach is seen in the BHP Mitsubishi Alliance Community Partnerships Program (BHP Mitsubishi Alliance 2004; Centre for Social Responsibility in Mining 2005). One of the Program's projects relates to a partnership between the BHP Mitsubishi Alliance and Learning Network Queensland. Learning Network Queensland is essentially an Adult and Community Education provider that operates online access centres throughout the state. The Program recognises that 'developing a pool of skilled people in our communities is essential to the long term sustainability of both the communities and the BHP Mitsubishi Alliance' (BHP Billiton Mitsubishi Alliance 2004, p.8).

CDEP outcomes

Community Development and Employment Projects improve access to education and training for participants by coordinating training provision and providing encouragement and financial support for training delivery and participation (Madden 2000; Misko 2004). The scheme appears to have a capacity building function in many Indigenous communities (Northern Territory Council of Social Services 2004; House of Representatives Steering Committee on Aboriginal and Torres Strait Islander Affairs 2004).

> When completed, training programs were perceived to provide communities with trained and qualified personnel who would perform trade and skilled tasks which, in the past, had been performed by non-Indigenous tradespeople. (Misko 2004, p. 31)

Benefits for individuals include the enabling of people to acquire general work skills and to attain formal qualifications and licences through access to industry-specific accredited training, thereby improving their capacity to apply for positions in external labour markets (Misko 2004). Miller (2005), in a systematic review of Indigenous peoples' training aspirations finds:

> …strong evidence that a primary outcome and purpose of training is the support and realisation of community development goals… This links closely to the role that the Community Development Employment Projects scheme plays in many communities… (p. 22)

However there remains contention as to the employment validity and overall worth of the program (Yunupingu 2003; Ah Kit 2003; Stirling 2003a; ANTA 2004a; Hughes & Warin 2005). Misko (2004) says that the programs continue to reduce rates of unemployment for remote Indigenous Australians, 'nevertheless, the movement of participants into unsubsidised employment in areas with thin labour markets remains difficult' (p. 5). Altman, Gray and Levitus (2005) see the lack of available of jobs as the main reason for the Community Development Employment Project's limited effectiveness in transitioning people to other work.

There is no doubt that despite the rhetoric about the need for 'real jobs' in remote (Indigenous) communities (Abbott 2002; Australian Broadcasting Corporation 2005) real and meaningful work is carried out in these remote contexts. Whether it is badged as a 'Community Development Employment Project' or 'Caring for Country' or 'Indigenous economic enterprise' is not the issue. Indeed there are some that argue that there is a need to 'reconceptualise the concept of "work", "jobs" and "employment" in general' (Arbon et al. 2002:110).

The challenge then, is to foster partnerships for learnings that enable communities to see the linkage between learning and these recognised activities. Where Community Development Employment Project Programs are in partnership with established enterprises, job prospects for trainees improve (Collins 2000). Guenther et al. (2004, p. 28) conclude that the Community

Development Employment Project 'forms the backbone of essential public and community services on desert communities'.

Personal outcomes

Personal outcomes of VET and ACE are identified in a range of areas. In this section they are described under headings of social connections, identity formation, income and leisure.

Making social connections

Birch et al. (2003) report that respondents to their survey said that making friends was an important benefit for ACE students. ACE's role in the social network may have special significance for Aboriginal and Torres Strait Islander students:

> For these students, adult and community education implied a community centre, an opportunity to congregate and share experiences, as much as a place for learning new skills. In some cases, the formal training was secondary to informal class information sessions and information sharing. (p. 32)

Other research supports the view that an important benefit of learning generally is that it facilitates 'making friends' (Clemans et al. 2003). Falk, Golding and Balatti (2000, p.ix) suggest that through engagement in ACE learning 'students enter networks, help create new networks and extend their connections'. Balatti, Black and Falk (2006, p.46), in a study of adult literacy and numeracy course outcomes report that as a result of participation students 'demonstrated changes in their lives, often major changes involving social networks'. They go on to note that while students identified these changes they were not 'officially recognized by institutions'.

 With regard to VET, it has been claimed that, for Indigenous people in the Northern Territory, 'the training reform agenda has fallen short of recognising the importance of personal and social outcomes' (Clark 1997). In recent years, however, policy direction for VET and Indigenous people has moved to a position on outcomes beyond the traditional focus of employment results (Guenther 2004) and includes cultural inclusivity.

Identity formation: self-efficacy, self-concept and raising awareness

The way people understand themselves is to some extent dependent on their relationship with others. This 'identity' then is a relational construction (Martin, Gutman & Hutton 1998; Mishler 1999), a lifework of the individual located in community and society (Erikson 1975), an ongoingly produced construction (Davies & Harre 1990) within social interactions in various fields of relations (Bourdieu 1980) or discourse communities (Gee 1990). Language is an important part of identity formation (Gee 2001; Elliott 2001). Identity can also be defined in terms of the individual. Ashmore and Jussim (1997), in a review of psychology literature suggest that in the previous four decades the breadth of research had expanded in the order of ten-fold and the volume of works published on the topic had more than doubled in the two decades to 1993. The topics covered under the subject heading of self and identity includes: self-concept, self-evaluation, self-perception, self-esteem, self-reinforcement, self-confidence, self-efficacy, self-narrative and self-report among many others. Others (e.g. Garrett 1998; Hill 2001) suggest that a person's identity is largely determined by an individual's self-consciousness.

The literature draws many connections between identity formation and learning (Ferdman 1990; McCarthey 2001; Wenger 1999). Aspects of identity such as self-esteem, self-confidence and motivation, often described as generic skills (Gibb & Curtin 2004), are reported in research as personal outcomes of participation in VET (Dawe 2004; Dumbrell 2000). The value of increased personal confidence and self esteem go beyond the individual for example, 'where someone's

strong sense of personal identity and high self-esteem has a positive effect on the identity capitals of those around' (Schuller et al. 2004, p.17).

The recent NCVER (2005) publication, *Indigenous Australians' training experiences 2004*, shows that nationally the two most important benefits of training reported by respondents are 'more confidence/feel better about self' (91 per cent of respondents) and 'communicate or relate to people better' (89 per cent). These items rate ahead of work related benefits and point strongly to the likelihood that identity formation outcomes are at least as important—if not more important—than employment related outcomes. This is supported by research in the adult literacy/VET field (Black, Balatti & Falk 2006).

Community Development Employment Project participants report an increase in self-esteem and confidence as a result of being engaged in work and training and acquiring qualifications (Misko 2004). Miller in her *Systematic Review* (2005) suggests that

> …personal outcomes Indigenous Australians obtain through training are among the most critical. They are the enabling factors to achieving other positive outcomes in education, employment and community development. A significant outcome Indigenous people attain through training is self-development, such as recorded improvements in confidence, self-esteem and motivation to undertake further training, seek employment or participate in the workplace more effectively. Other outcomes include strengthened cultural identity, greater participation in community and cultural activities, improved health and nutrition, and new knowledge, skills and support to help look after family.

ACE users report increased confidence and self-esteem as a benefit of their course. Birch et. al (2003, p.30) suggest that they use this increased confidence to engage in further learning. Schuller et al. (2002) point to the likely outcomes of this identity formation in terms of values and civic engagement:

> …adult education institutions, and further education colleges in particular, have certain characteristics that are highly favourable to effecting shifts in adult values and identities in ways that promote civic engagement. (pp. 59–60)

It can sometimes be difficult to separate identity formation outcomes from educational, vocational and social outcomes. Balatti, Black and Falk (2006, p.23) recognise this in their study of adult literacy and numeracy course outcomes, observing that different kinds of learning outcomes result from the same learning experiences. The following illustration drawn from a vignette in a Queensland Department of Employment and Training (2003) performance report highlights the intertwining health, educational and identity benefits that arise from participation in adult learning.

> Vince walked 30 kilometres a day to attend adult literacy and numeracy classes, part of his quest to conquer the dyslexia that hampered his learning at school. In the process, he lost 76 kilograms and kicked a smoking habit, thanks to the exercise and the improved self-esteem he has gained from success at TAFE. (p. 20)

Income

Participation in VET and learning has been associated with improved employment opportunities and better access to higher paid jobs (Centre for Research and Learning in Regional Australia 2002; Doyle, Kerr & Kurth 2000; NCVER 2004; OECD 2004). One of the motivating factors driving participation in training is to increase individual earning power (Long 2001). Ryan (2002) suggests there is a 10 per cent increment in wages for each level of vocational qualification attained. As 47 per cent of employees in the highly paid mining industry have a VET qualification (ANTA 2004b), VET may be seen as significantly influencing income across the mining areas of northern Australia. Guenther (2004) has shown that there is a positive correlation between income and certificate qualifications in Northern Territory communities.

Indigenous participants in Community Development Employment Projects report income benefits as a major benefit from the scheme, although Misko (2004) notes that Community Development Employment Projects income, higher than unemployment benefit, is nevertheless well below income gained from full-time work. The reasons for differences between Indigenous and non-Indigenous income outcomes are not however necessarily related to Community Development Employment Projects. It is widely known that Indigenous learners generally are less likely to achieve post school qualifications and are less likely to achieve Year 12 outcomes than non-Indigenous learners. Table 2, based on the 2002 *National Aboriginal and Torres Strait Islander Social Survey* (ABS 2004), summarises these educational outcomes. Not only is there a difference between Indigenous and non-Indigenous outcomes, there is also a difference between remote and non-remote Indigenous outcomes. The data would suggest that despite the high participation rate in training in remote areas, this participation is not translating into completions or qualifications.

Table 2   Educational characteristics of Australian Indigenous and non-Indigenous people

Education	Indigenous proportion (%)			Non-Indigenous (%)
	Remote	Non-Remote	Total	All areas
Attending post-school institution				
University or other tertiary institution	1.4	4.3	3.5	6.3
Other post-school institution	4.4	8.6	7.4	5.7
Has a non-school qualification				
Bachelor degree or above	1.6	4.5	3.7	16.9
Certificate or Diploma	15.3	27.4	24.1	32.7
Total with non-school qualification	19.1	32.8	29.0	50.1
Does not have a non-school qualification				
Completed Year 12	9.1	11.2	10.7	15.3
Completed Year 10 or Year 11	26.7	26.9	26.9	18.8
Completed Year 9 or below	45.1	29	33.4	15.8
Total with no non-school qualification	80.9	67.2	71	49.9

Source: ABS 2004

Leisure

Learning contributes to leisure in two ways. It provides skills for leisure based industries (including tourism and hospitality) and it is an activity that many adults, particularly those pursuing ACE type learning, enjoy. VET has been shown to contribute to community cultural and leisure activities in a number of ways (Birch et al. 2003; Falk et al. 2000). The Centre for Research and Learning in Regional Australia (2002) found that VET contributed positively to lifestyle interests. ACE participants tend to favour courses in the humanities field of study and visual/performing arts (NCVER 2001a). The most important and valued strength of ACE is that it is perceived to be an 'informal, friendly, non-threatening environment' (Saunders 2001, p.30), which undoubtedly contributes to the pleasure of learning. Jones et al. (2004) agree:

> Common strengths of the ACE sector are the relaxed environment, community focus and low-entry barriers for disadvantaged groups, including older workers.

Saunders (2001, p.16) asserts that ACE learning has 'increased the potential for individuals to make the transition from informal learning for leisure and self-improvement to more formal learning for vocational purposes'. It could also be argued that VET can just as easily be a vehicle for self improvement, perhaps with a vocational bias. The 2005 Student outcomes survey (NCVER 2005) reports that 17 per cent of graduates and 30 per cent of module completers intended to study for personal outcomes.

Outcomes frameworks

In a *Review of Statistics on Adult and Community Education* ABS (2003c) assert that 'more information is needed about the outcomes of ACE participation and how and why ACE makes a difference'. The review identifies a number of 'gaps', which show deficiencies in data.

1. Basic information about participation and non-participation in ACE-related activity, and the characteristics of participants and non-participants across all states and territories.

2. Comprehensive information on ACE providers and their characteristics, particularly those outside the publicly-funded sectors (which are adequately covered through the AVETMISS Provider Collection although high non-response detracts somewhat from their usefulness).

3. More information about the outcomes of ACE participation, including pathways to employment and further education, with specific market information to help answer the question 'Does ACE make a difference?'

4. Information about funding to, and the uses of funds within, the ACE industry, as well as those which involve provision of ACE by other institutional providers.

5. More information on participation in adult learning generally across all age groups, and the reasons for participating or not participating in adult learning.

6. A common, agreed set of ACE systemic level indicators ie measures of national significance covering all areas of high importance in the framework, which are reported on a regular basis.

Partly in response to these identified gaps research on ACE outcomes conducted by Clemans et al. (2003) categorise ACE outcomes in a framework partly built around Delors (1996) four pillars of education: Learning to know, learning to do, learning to be and learning to live together. The Clemans outcomes framework is shown below in Figure 1.

Figure 1.   Framework of ACE outcomes

Outcomes	Learning to know	Learning to do	Learning to be	Learning to live together
	Breadth and depth of content and subject knowledge understanding	Enhanced skills for taking action	Growth in wellbeing and self-awareness	Strong and harmonious social relationships
Individual development outcomes				
Personal domain	Knowledge of self, the world, and how to learn	Skills for living in the private domain of family, friends and personal interests	A healthy, mature self-concept in private life	Supportive connections in personal settings
Public domain	Knowledge of democratic community life	Skills for democratic participation in the public domain	A healthy, mature self-concept in public life	Supportive connections in community settings
Work domain	Knowledge of work and work places	Skills for finding and sustaining voluntary and/or paid work	A healthy, mature self-concept in workplaces	Supportive connections in workplace settings
Community development outcomes	Collective knowledge and understanding of community life	Skills for joint action to develop community life	A purposeful local community with a strong identity	A community that values and embodies diversity, trust and reciprocity
Economic development outcomes	Local knowledge and understanding of economic life	Skills to develop local economies	An innovative and sustainable local economy	A confident local economy that prospers by making the most of its diversity

Source: Clemans et al. 2003

This largely qualitative framework is contrasted to the ABS (2003d) outcomes framework, which emphasises more immediately quantifiable outcomes measures.
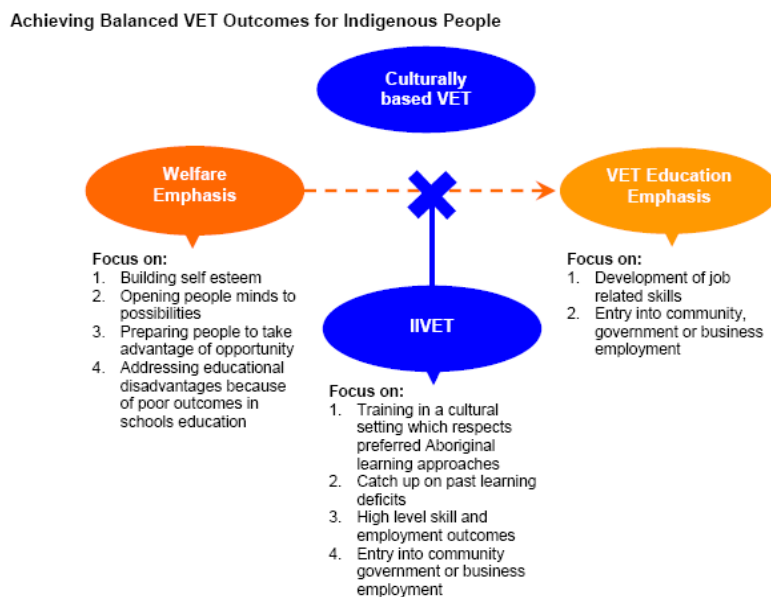
Figure 2. ABS framework for measuring education and training statistics

	Context	Participants	Non-participants	Providers	Resources — Financial	Resources — Human	Resources — Physical	Activities	Outputs & Outcomes
Individual	Parents' qualifications; Eligibility to receive youth allowance	Age distribution of participants; Characteristics of participants in continuing education	Main reason for not studying	Main field of education provided by individual provider	Household weekly expenditure on learning activities	Number of Indigenous teachers	Access to internet at home	Level of education; Time spent studying	Educational attainment; Completions and partial completions; Literacy and numeracy measures
Organisational	Community involvement in schooling	Businesses consuming training by number of employees	Number and characteristics of businesses not consuming training	Geographic distribution of higher education institutions	Sources and uses of funding on education and training	Distribution of VET institutions by number of teaching staff	Teaching resources used in schools or preschools	Level and type of training provided by businesses; Quality/effectiveness measures	Whether training improved business productivity
Systemic	Unemployment rate	MCEETYA participation rates	Proportion of 15–19 year olds not undertaking any education or training	No. of public primary schools in Australia	Total expenditure on VET; Expenditure per FTE student	No. of primary school teachers in state or territory; Staff to student ratios	No. of higher education places	Apparent retention rates	No. of higher degree research completions

Levels: Individual, Organisational, Systemic
Elements (column header spanning top)

Source: ABS 2003d

A further framework for Indigenous VET outcomes is offered by the Department of Education, Science and Training (2003), shown in Figure 3.

Figure 3. DEST Outcome framework for Indigenous people

Achieving Balanced VET Outcomes for Indigenous People

Culturally based VET

Welfare Emphasis
Focus on:
1. Building self esteem
2. Opening people minds to possibilities
3. Preparing people to take advantage of opportunity
4. Addressing educational disadvantages because of poor outcomes in schools education

IIVET
Focus on:
1. Training in a cultural setting which respects preferred Aboriginal learning approaches
2. Catch up on past learning deficits
3. High level skill and employment outcomes
4. Entry into community government or business employment

VET Education Emphasis
Focus on:
1. Development of job related skills
2. Entry into community, government or business employment

Source: DEST 2003, p.20

While outcomes of VET are measured in terms of a fairly standard set of measures relating to employment, completion and satisfaction, for example in Student Outcomes Surveys

(e.g. NCVER 2005b), employer views (e.g. NCVER 2001c) and apprenticeship and traineeship commencements and completions (e.g. NCVER 2005d), there is a recognition that these standard reports only paint part of the VET outcomes picture. Dumbrell, in his 2000 report *Review of research*, points to a complex array of stakeholders, all with their own expectations of VET.

The Centre for Research and Learning in Regional Australia (2002), in assessing VET outcomes in 10 regions across Australia, based their methodology on a series of eight OECD (1982) social indicators under headings of health, education and learning, command over goods and services, employment and quality of working life, time and leisure, physical environment (access and ecology), social environment and personal safety. Their assessment of VET's effectiveness in meeting community need was built around measures that related to these eight indicators. These indicators have been used in a number of subsequent studies (e.g. Balatti & Falk 2002; Black, Balatti & Falk 2006; Falk & Guenther 2002; Falk et al. 2000; Guenther 2003) and align closely with the ABS well-being measures (ABS 2001).

These various frameworks for measuring learning outcomes offer several lenses through which we can look at learning outcomes, which include both VET and ACE activities. However, rather than reinvent the 'outcomes framework wheel', the purpose of this research is to assess in a qualitative way the various socio-economic outcomes of VET and ACE. The OECD framework developed by the Centre for Research and Learning in Regional Australia for this purpose provides a useful way of assessing the outcomes. The Clemans et al. (2003) framework also adds a useful dimension to this framework by neatly dividing the outcomes into personal, community and enterprise sets. As has been shown in this chapter, this breakdown has provided a logical structure to the review of learning outcomes literature.

ACE/VET contexts in northern Australia

The characteristics of sparse population and high proportions of Indigenous peoples are important aspects that shape the context of education and training in northern Australia. Strategic plans dealing with education and training exist at all levels of government across northern Australia (ANTA 1998; Ministerial Council on Education, Employment, Training and Youth Affairs 2002; Department of Employment and Training 2002; Department of Training 2002; NT Government 2003; Commonwealth of Australia 2005). The main focus is vocational, but ACE is increasingly important in policy directions. This section considers different jurisdictional policy approaches and includes a description of the unique distinctives of the three study sites' contexts.

Jurisdictional policy approaches

Policy and strategic direction for VET in rural and remote regions of Australia is well developed. The Ministerial Council on Education, Employment, Training and Youth Affairs (2000a) framework for rural and remote education recognises the general disadvantage of rural students (Human Rights and Equal Opportunity Commission 2000) and lays a foundation for strategic plans to address inequities (Guenther 2004). In the Northern Territory the relevant legislation for the VET sector is the *Northern Territory Employment and Training Act 2002* which is administered by the Northern Territory Department of Employment, Education and Training. In Queensland the Department of Employment and Training work under the Queensland *Vocational Education, Training and Employment Act 2000*. The Commonwealth Department of Education, Science and Training oversees the national post-compulsory education and training policy agenda.

Commonwealth

VET national policy measures introduced since 1990 (NCVER 2001b) have included:

◇ The introduction of competency-based training and nationally accredited training packages;

◇ Abolition of age restrictions in 1992 to permit people of all ages to participate in apprenticeships and traineeships;

◇ Relaxation of the requirement for formal off-the-job training in apprenticeships and traineeships in 1994–95;

◇ The extension of traineeships to programs leading to the equivalent of certificate III, certificate IV or diploma level qualifications in 1994–95;

◇ Establishment of the Australian Qualification Framework in 1995; and

◇ Establishment of an integrated *new apprenticeship* system in 1998.

The Commonwealth government's abolition of ANTA and its announcement of its intention to set up 24 national technical colleges (Department of Education, Science and Training 2004)—four of these to be in northern Australia, in Darwin, Townsville, Gladstone and the Pilbara—are significant changes to VET strategy in 2005. The colleges are intended to 'promote pride and excellence in the teaching and acquisition of relevant trade skills at the secondary school level' (Department of Education, Science and Training 2005).

The gap between the number of new training entrants and industry skills need is increasing (Senate Employment, Workplace Relations and Education References Committee 2003). This is resulting in skills shortages in several industries, particularly the 'traditional trades'. Federal government policy's attempts to address identified skills needs (ANTA 2004b) include targeted programs aimed at stimulating local uptake of training (National Skills Shortages Strategy 2004) and importing skilled labour through immigration (Department of Immigration and Multicultural and Indigenous Affairs 2003, 2004).

Northern Territory

Issues relating to Indigenous education and training are important aspects of Northern Territory government policy. Indigenous people are more likely to gain an AQF level I or II qualification than a higher qualification and their pass rate for assessed modules is lower (Saunders et al. 2003). Outcomes beyond Certificate II in remote areas, particularly in much of desert Australia where approximately one fifth of the population is Indigenous, have been shown to be lower than for non-Indigenous people in the same regions and Australia as a whole (Guenther et al. 2004). However, independent Aboriginal community-controlled colleges' educational outcomes from VET programs have been higher than Indigenous outcomes attained from the VET sector as a whole. This is believed to be due in part to the additional support provided in these educational organisations (Durnan & Boughton 1999).

Indigenous people's comparatively low proficiency in English literacy and numeracy is a significant barrier to participation in formal learning, which requires these underpinning skills. Nearly 40 per cent of Indigenous people living in remote areas speak English as a second language (ABS 2004) and in desert regions this may be as high as 55 per cent (Guenther et al. 2004). Literacy and numeracy standards among Indigenous primary and secondary school students, particularly in remote areas, are consistently below those of non-Indigenous students across Australia (Charles Darwin University/NT Department of Employment, Education and Training 2004; NT Department of Employment, Education and Training 2004). Other barriers to Indigenous achievement in education and training include physical and mental health problems and substance abuse (Charles Darwin University/NT Department of Employment, Education and Training 2004), lack of qualified trainers and teachers with understanding of Indigenous

students' learning styles (Hughes & More 1997), and geographical dispersion, small community size and community dysfunction (Catts & Gelade 2002). Nevertheless, the last ten years have seen a large increase in Indigenous participation in VET, although the rate of completions continues to be of concern (ANTA 1999; Balatti & Goldman 2004).

There are however numerous examples of partnerships or collaborations, subsidised by government or private funding, designed to promote trained employment for Indigenous people across northern Australia, particularly in, but not confined to, the tourism and mining industries (Allen Consulting Group 2001; Department of Industry, Tourism and Resources 2004; Department of State Development and Innovation 2004; Indigenous Business Association 2004; Indigenous Enterprise Partnership 2004).

The Northern Territory government's Skill Shortage Trades Employment Incentive is an attempt to address regional and industry skill shortages. It provides a financial incentive for businesses to employ additional apprentices in areas with identified trade skill shortages (Department of Employment, Education and Training 2005b).

Queensland

A key element of Queensland's Smart State Strategy is skills development. The strategy states that 'the Queensland Government will use its influence to cultivate a confidence about the importance of knowledge, creativity and innovation to our future' (Queensland Government 2005, p.17). A major focus of the strategy is to upskill the workforce to take advantage of new opportunities in knowledge based industries and new innovations. However, while the strategy does also discuss a strategy for 'building a community that cares for its people and fosters and celebrates knowledge and creativity' (p. 47) it is not immediately apparent where ACE programs might fit into this vision.

Embedded within the Smart State Strategy is an initiative called *Education Training Reforms for the Future*, which is designed to provide more diverse and flexible learning pathways, inspire academic achievement and flexible learning pathways' (p.39). Queensland's Breaking the Unemployment Cycle program provides specific provisions for employers wanting to employ apprentices in industries with skills shortages (Department of Employment and Training 2004). It also provides incentives for long-term unemployed and Indigenous people wanting to enter the workforce. Within Smart State the focus of the Queensland Government's commitment to adult learning appears to be clearly on adult learning for industry and employment (Department of Employment and Training /Department of Education and the Arts 2004). While the forward to the policy document *Adult skills and knowledge for the smart state* is written in terms of lifelong learning, the direction of the 'commitment' is very much on skills gaps and industry needs. Funding for these ACE programs therefore is firmly tied to employment and economic outcomes rather than community development outcomes.

These State government strategies raise questions then about where community based learning is heading in Queensland, a question which has also been posed by the peak body for adult learning in Queensland, the Lifelong Learning Council of Queensland (Clark 2004). Lifelong Learning Council of Queensland hosts a directory of providers and courses across Queensland on its website (http://www.llcq.org). A search of the Bowen Basin region reveals very few registered providers or courses. In Rockhampton, for example, there is one community provider listed. In Emerald there is one provider listed with zero courses. One other organisation that plays a key role in the Bowen Basin region is Learning Network Queensland (http://www.lnq.net.au). This organisation has no single funding source and applies for grants from various sources. A report (Learning Network Queensland 2004) obtained from one Learning Network Queensland centre highlights the variety of funding sources:

> 1. ALW [Adult Learners Week] x 17

2. Technology Survival Skills x 5

3. Community Responsive Training Program DET x 12

4. Seniors Week x 1

5. Duaringa Shire Council x1

6. Office of Women x 2

7. Dept of Transport and Regional Services x 1

8. Community Job Program x 2

9. Volunteer Small Equipment Grant

10. Chinchilla Family Support Centre

11. Murilla Community Centre

In summary then the Queensland State policy on Adult Learning is heavily focused on vocational learning. Organisations wanting to promote community based learning need to bid for funds from a variety of sources. The VET strategy, by contrast is strongly targeting a range of groups with a clear goal of building the knowledge and skills base of Queensland so it can take advantage of new and emerging opportunities within established industries and new, innovative enterprises.

Northern Australia: Distinctive characteristics

The northern Australian context for training delivery provides several challenges and opportunities. The region, which can be described as rural or remote, is characterized by:

✧ Low population density and dispersed and diverse, relatively inaccessible communities;

✧ Relatively high proportions of Indigenous people (approximately 15 per cent of the population), and population growth in the Northern Territory and the Kimberley region of Western Australia (ABS 2002b), mainly influenced by large numbers of Indigenous, many of whom do not speak English as their first language;

✧ Population growth in those areas is being offset by losses through interstate migration, resulting in a skills drain (Department of Employment, Education and Training 2005a);

✧ A relatively strong mining industry base and, particularly in Queensland, a strong agricultural sector;

✧ Tourism, the environment, art and culture play significant roles in driving local economies and are seen to offer potential for remote communities in terms of sustainable enterprise and employment;

✧ A large government sector, including a major defence component;

✧ Employment among Indigenous people in remote communities largely limited to Community Development Employment Projects (Yunupingu 2003; Ah Kit 2003; Stirling 2003; ANTA 2004a; Hughes & Warin 2005);

✧ A young age profile (particularly among Indigenous communities) (ABS 2002b), placing additional demands on education and training sectors. In 2004, Indigenous student enrolments accounted for 38 per cent of all Northern Territory enrolments (compared to 25 per cent of total population); median age of population in all regions outside of Darwin was less than 30, and as low as 24.8 (compared to 36.1 for Australia) (ABS 2005a, 2005b) ; and

✧ Low educational attainment among Indigenous peoples (Robinson & Hughes 1999) and strong trades qualification profiles for non-Indigenous peoples (particularly males).

The predominant employers across northern Australia are retail and government administration and defence sectors (ABS 2002c). Retail industries tend to decline with remoteness, while government, administration and defence is the largest employer in very remote areas and second

largest in accessible areas. In the Northern Territory the government sector includes Community Development Employment Project initiatives, which employ approximately five per cent of the total labour force (ABS 2002c) and constitutes about half of all Indigenous employment (Department of Employment, Education and Training 2005a). Agricultural industries are the second largest employer in northern Queensland region (ABS 2002c). Mining is the largest employer in remote areas and the second largest employer in moderately accessible areas (ABS 2002c).

The remoteness of northern Australia is a factor that impacts on education and training delivery, but the issue would appear to be mostly about accessibility (Golding & Pattison 2004). Much of the negative impact of living in remote regions is associated with Indigenous communities (Guenther 2004), as opposed to mining or rural communities.

Health: Remote Indigenous communities

Indigenous status is a factor associated with poor health outcomes in rural and remote areas (Australian Institute of Health and Welfare 2002; ABS 2003b). Better health outcomes are linked to better standards of education (Feinstein 2002; Dawe 2004), which can mean better employment, higher income and a healthier lifestyle (Feinstein 2002). On the other hand the capacity of whole communities may be adversely affected by levels of poor health, which also limit the effectiveness of education and training. This issue has particular relevance among the Indigenous peoples of Australia's northern regions (Aboriginal and Torres Strait Islander Commission 1999; Bauert et al. 2001; Charles Darwin University/NT Department of Employment, Education and Training 2004; Human Rights and Equal Opportunity Commission 2000; House of Representatives Steering Committee on Aboriginal and Torres Strait Islander Affairs 2004; NT Department of Education 1999; Steering Committee for the Review of Government Service Provision 2003). A selection of health indicators are shown at Table 3, comparing the three sites with Australian state and territory jurisdictions. The significance of health to the region becomes readily apparent with infant mortality rates and death rates more than double the rates that are found in every state.

Table 3.   Selected health indicators by site compared with all jurisdictions, 2001

Site	Infant Mortality Rate (x1000)	Total Fertility Rate (x1000)	Indirect Standardised Death Rate (x1000)
Central Australia Average	10.95	2.325	14.4
Kakadu Average	9.9	2.77	19.7
Bowen Basin Average	6.25	2.095	7.15
Queensland Average	5.9	1.79	7
Northern Territory Average	11.4	2.22	11.9
Victoria Average	5	1.63	6.7
South Australia Average	4.5	1.7	6.9
Western Australia Average	4.7	1.77	6.6
Tasmania Average	6.6	1.92	7.6
Australian Capital Territory	4.3	1.59	6.2
New South Wales Average	5.5	1.8	6.9

Source: ABS 2003c

Tourism: Kakadu National Park

Tourism and hospitality play an increasingly significant role in the economies of the savanna region. In the Northern Territory alone, in the period 1997 to 2003, expenditure by visitors increased by 27% (Northern Territory Tourism Commission 2004). The significance of World Heritage listed national parks such as Kakadu, the Indigenous cultural heritage of the region and

the tropical climate provide the tourism industry with opportunities to market a unique tourism experience both to the more populated southern states of Australia and internationally. An indication of the importance of tourism to the region is given by the relative economic benefit of tourism to the region. In the Northern Territory, tourism accounts for five per cent of the Gross State Product, and contributes about 15000 jobs to the economy (Northern Territory Tourism Commission 2003).

Mining: Bowen Basin

Mining plays a significant role for the economies of large areas of remote Australia, including the desert region, where it is the largest employer (Guenther et al. 2005). Skilled labour is in short supply and in many remote communities expensive fly-in/fly-out provisions are frequently used to ensure continuity of labour supply in the mining industry (Woolcock et al. 2003) in the face of declining local populations (Collits 2000). In mining, while these measures are seen to be a 'cost-cutting measure' (ABS 2000) designed to avoid the significant costs associated with setting up and maintaining infrastructure in purpose-built mining towns, one of the consequences of these strategies is a general decline in the capacity of the region associated with the mining development. They are also reported to have adverse impacts on employee recruitment, retention and occupational health and safety (Beach & Cliff 2003). Coupled with these issues are significant costs: Beach et al. (2003) for example estimates that:

> Based on conservative cost estimates from other industries, an average turnover rate of 19 per cent at an open-cut mine with 300 employees will cost the company around $2.8 million annually.

In Queensland, the Queensland Mining Industry Training Advisory Body, recognising the issue, has begun to address the issue by developing the concept of a skills eco-system, in an attempt to build local skills in regional areas, thus avoiding the costs associated with fly-in fly-out labour supply arrangements.

Other collaborative partnerships have been formed at a regional level to address many of the issues around the industry development of the Bowen Basin region. These partnerships include Central Queensland A New Millennium, Rockhampton Regional Development, the BHP Billiton Mitsubishi Alliance Community Partnerships Program and the Central Highlands Development Corporation. These organisations have well documented strategic plans and goals, all of which include a skills development component (Rockhampton Regional Development Limited 2005a; Centre for Social Responsibility in Mining 2005; Central Queensland A New Millenium 2002). They are also based on a sound statistical basis designed to consider the demographic, employment and economic trends of the region. (Central Highlands Development Corporation 2004; Rockhampton Regional Development Limited 2005b).

All of these issues apply directly to the mining communities of the Bowen Basin, where the pressures for development are resulting in significant skills shortages and gaps. The literature from the various partnerships cited above points to the ongoing importance of coal mining and related industries in the Bowen Basin for the foreseeable future.

ACE/VET connections

The final section in this literature review will focus on literature around VET/ACE partnerships. Partnerships are here defined in terms of a formal or informal relationship between two or more organisations. A VET/ACE partnership could include VET and/or ACE providers, industry groups or enterprises, government agencies or departments, community groups or other stakeholder groups with a mutual interest in learning.

Types of partnerships

Partnerships for education and training arise for a variety of reasons. The complexity of partnerships means that defining success for a partnership can be ambiguous. Regardless of the type or purpose of partnership, one of the key motivators for the formation of partnerships is the possibility for mutual benefit that arises from the collaboration. Seddon and Billet (2004, p.26) note that the 'capacity of the social partnership to develop shared understandings about its purpose is central to the partnership's continuity and efficacy'. Shimeld (2001), commenting on community partnerships, agrees that such collaboration:

> …develops around an issue of common interest that typically is beyond the ability of one person or existing agency to address. The stimulus to action may have come from within or outside the community with motivation for engagement stemming from altruism to enlightened self-interest.

The Centre for Research and Learning in Regional Australia (2001) found that drivers for collaborative partnerships among VET stakeholders were built around the needs of stakeholders as the drivers. These drivers result in:

✧ Collaborations based on cultural association (eg Indigenous)

✧ Enterprise-driven partnerships

✧ Policy-driven collaborations

✧ Provider-driven collaborations

✧ Skills development for industry.

Kilpatrick and Guenther (2003) in a review of 117 VET partnerships in Australia found that the purpose of partnerships was dependent to an extent on the context of the partnership. These contexts included the nature of the partnerships (in terms of its 'type', the type of individual stakeholders, the location of the partnership (particularly whether it was rural or urban).

Divisions between vocational education and adult and community education have been described as 'artificial, unhelpful and arbitrary' (Golding et al. 2001, p.123), but there are 'weaknesses in the relationships and communication between ACE providers and institutions in other sectors' (p.125), with a need to clarify the status of ACE courses and their current and potential relationships with those of the other sectors. Saunders (2001) also emphasises the need for established pathways supported by linkages between the sectors if students are to reap maximum benefit from vocational study with ACE. Liaison between ACE and mainstream VET personnel would help to maximise the benefits obtainable from linkages, and 'ACE vocational learning provision should be mapped both against training packages and mainstream VET provision' (p.11). Notwithstanding the need for better outcomes for students, the drive for VET/ACE partnerships may be more about accessing financial resources, funded through the VET system on the basis of outcomes. Falk (2005), commenting on these issues, sees risks to the quality of adult learning pedagogy if there is a reliance on short, vocationally oriented courses to fund ACE programs.

Partnership models are widely discussed in the literature. In a context of extension courses for agricultural clients, Kilpatrick, Fulton et al. (2001) present models of collaborations and partnerships between clients and providers of education and training or other learning activities. The partnerships consist of two or more people or organisations working together on short- or long-term projects to achieve commonly held goals (Centre for Research and Learning in Regional Australia 2000). Among the models discussed is one that could be the basis for ACE-VET connections: provider-provider partnerships are formed by private and public training provider partnerships in the United States of America, motivated by performance improvement goals (Kearns & Papadopoulus 2000). In the United Kingdom, government is a third partner in

this model; the collaboration is formed in order to obtain subsidies, and the American approach is extended by setting national learning standards in consultation with an advisory body (Kilpatrick, Fulton et al. 2001).

Purpose of partnerships: why do they form?

Cross-sectoral partnerships between educational institutions, employers, community bodies and local education authorities are sometimes formed in order to address local labour market needs. In the United Kingdom, for example, the British Lifelong Learning partnerships and Learning and Skills Councils coordinate training across adult, community education and post-school sectors (Kearns & Papadopoulos 2000). Some ACE providers operate in partnership with schools, co-delivering programs with schools to ensure students stay engaged in the learning process (Dunn & Joseph 2004). Collaborations in northern Australia to identify and take action to meet skills deficits in industry are similar to these.

VET partnerships are developing across Australia to address the needs of communities and interest groups within these (Kearns et al 1996; Kilpatrick, Fulton & Bell 2001; Kilpatrick, Johns, et al. 2001). Recent research into more than a hundred of these partnerships indicated that rural VET partnerships are particularly useful for meeting the needs of regional communities (Kilpatrick & Guenther 2003). In the words of Guenther (2004), 'The value of strategic VET alliances and partnerships for effecting change and building the knowledge, skills and capacities of rural and remote communities cannot be underestimated'.

However, the cross-sectoral linkages that exist between ACE and VET remain sporadic (Wheelahan 2000). Partnerships and collaborative arrangements between schools, VET and ACE providers are advocated in order to address the general and vocational needs of school students enrolled in applied learning and vocational education courses (Henry & Grundy 2004). Similarly, partnerships between VET and ACE providers could address the needs of increasing numbers of adult students obtaining qualifications or parts of qualifications from a range of different sectors (Dunn & Joseph 2004). Kearns (2004) notes increasingly active collaboration between education sectors in Australia, 'with adult and community education, schools, VET, and universities collaborating and contributing …. [and] learning brokers active in building partnership and collaboration' (p.17).

In Victoria, responding to the need to improve linkages between qualifications, the Victorian Qualifications Authority is investigating the possibility of developing a credit-based framework for post-compulsory qualifications across the state. Similar frameworks are in operation or being developed overseas, such as in New Zealand, Scotland, Wales, Northern Ireland, England, the European Union and South Africa (Dunn & Joseph 2004).

Henry and Grundy (2004) write:

> There is a sense in which the VET sector of the education and training systems of Australia is driving the agenda for cross-sectorial reform. A perusal of the research projects funded by ANTA and NCVER over the past five years indicates a drive in the direction of building the arguments for cross-sectoral developments and identifying the organisational arrangements that will facilitate collaborative institutional and programmatic relationships. (p.25)

Cross-sectoral linkages are a consistent theme in recent national and State education policy documents across Australia. The Ministerial Council on Education, Employment, Training and Youth Affair's *Framework for Vocational Education in Schools—Policy Directions* (2000b) noted the need for establishing linkages between institutions delivering related vocational learning services. Tasmania's post-compulsory education and training strategy *Learning Together* encompasses

compulsory education linkages to post-compulsory options in VET and ACE (Department of Education n.d.).

Function of partnerships: what do they do?

If VET and ACE stakeholders do collaborate, the question naturally arises: what function do the various stakeholders plan and for what purpose? Guenther (2005b, p.302), in research about VET and capacity building in northern Australia found three main functions of partnerships:

✧ First, partnerships acted to facilitate access to resources. There were two main aspects to this facilitative role: accessing funding for the program long-term commitment to partnership goals and outcomes.

✧ Second, partnerships provided leadership and direction. One of the key functions described was that of providing coordination, liaison or brokerage between providers, employers and participants. A second aspect of this function was providing clear direction and leadership. A third aspect of this function of the partnership was described in terms of passion and commitment.

✧ Third, partnerships were effective in building strategic relationships with program stakeholders. There were several ways this was expressed—in the context of relationships among partners, between partners and clients, and as linkages, for example to funding bodies. This was sometimes discussed in terms of mentoring. Embedded within the process was the formation of trust within the relationship. One of the important outcomes of the relationship-building process was described in terms of ownership.

Saunders (2001, p.71) sees the roles of VET and ACE providers as complementary, 'to provide local tutoring, mentoring or supervision for students undertaking mainstream VET courses, or ACE providing equivalent courses for students in areas not served by mainstream VET'. Skills South Australia (2003, p.11) recommends the formalisation of ACE/TAFE relationships to achieve greater policy coherence and complementarities between formal and non-formal learning. Jones et al. (2004), in research into ways of re-engaging older people in the workforce found that ACE can be seen as a stepping stone into more formal education:

> There is a generally agreed view amongst job seekers and providers that ACE could and should act as a stepping stone or provide 'the basics' for the move to the next stage. 'It builds an individual's capacity.' (p.36)

Outcomes of partnerships: what do they achieve?

In the context of VET/ACE connections it could reasonably be expected that some, if not most, of the outcomes of partnerships, networks and collaborations will be directly related to learning. The outcomes of effective collaborations may include:

✧ At the training system level: savings from shared resources (Centre for Research and Learning in Regional Australia 2001); improved knowledge of clients' needs (Kilpatrick, Fulton et al. 2001); increased and better informed demand from all training clients (individuals, enterprises and communities) (Kilpatrick, Fulton et al. 2001); high morale within the alliance (Faulkner 1995); opportunities to enhance the quality of programs and develop innovative learning strategies (Kearns et al. 1996; Ferrier et al. 2000).

✧ For clients: identified, accessible training pathways (Centre for Research and Learning in Regional Australia 2001).

✧ For community and society: better community response to change (Centre for Research and Learning in Regional Australia 2001); enhanced social, economic and environmental outcomes (Taylor 1997).

There are however other outcomes from partnerships, that are not necessarily related to clients, systems or the products of the learnings that take place as a result. There is an intrinsic value for many partners in coming together. Kilpatrick and Guenther (2003), in a review of 117 training partnerships in Australia, found that the value of partnerships was seen more in terms of indirect benefits that arose out of collaboration than in direct benefits such as increased productivity, skill development or meeting specific enterprise needs.

In terms of the measures of success of partnerships, Kilpatrick and Guenther found that generally partners themselves decided what outcomes were considered to be effective. They observed that partnerships did not consult with the objects of their activity (clients or equity groups) in order to determine the effectiveness of outcomes. According to Sommerlad, Duke & McDonald (1998, p.48) effective partnerships involve:

✧ recognition of the risks associated with collaboration as well as the potential benefits, and regular assessment of costs and benefits;

✧ concern with strategic and cultural fit as important factors in selecting partners;

✧ an awareness of organisational boundaries and management of the 'boundary relationship' between collaborating organisations in ways that create conditions for trust and inter-dependence;

✧ development of collaborative know-how and its diffusion throughout the organisation;

✧ an organisational capacity for reflexivity and organisational learning.

A similar set of principles were developed in a study of two Tasmanian municipalities by Kilpatrick et al. (2002), which considered practical ways that partnerships between training providers, local communities and industries could facilitate employment growth. They found that

> Effective partnerships can be developed when the purpose is clear; all key stakeholders are involved; consideration is given to what is happening already in the community; community vision and priorities are developed; cross-sectoral linkages and shared language are built; and care is taken to turn the vision into concrete plans. (p.5)

Leadership is yet another factor that contributes to partnership effectiveness. Kilpatrick et al. (2002), in a review of findings of two separate national learning partnership studies, found that the success of the partnerships was dependent in part on a series of leadership 'interventions', not so much on the leaders themselves.

The literature reviewed in this section represents a small cross section of the research in this field. The outcomes of partnerships are as diverse as the partnerships themselves. The effectiveness of these partnerships is dependent on a range of factors that are highly dependent on the context of the partnerships.

Conclusions

The preceding literature review has encompassed what we anticipate to be the key areas involved in research into VET/ACE connections and the role of partnerships therein. Following the definitional section where available – and sometimes overlapping – definitions were presented, the review provided sections on outcomes, the training and learning contexts of northern Australia and evidence about existing connections between ACE and VET.

The key points emerging from the review can be summarised as follows:

✧ There is little consensus about definitions of ACE and VET since each research and policy body seems to take a different angle: some describe them according to who provides the

service. Some define them by their degree of formality, by their accreditation status. Still others define them by learning outcomes and impacts, including community, social and economic impacts;

There is considerable evidence that both VET and ACE result in positive outcomes for individuals, communities and as such generally meet policy targets set for them. Literature overviewed has described the ways in which VET and ACE may impact on community and social outcomes, health outcomes, social cohesion, environmental management, employment, is a crucial facilitator of risk management, assists in meeting skill needs of industry and has a range of personal outcomes including making social connections, identity formation, income-related outcomes and leisure outcomes;

✧ While the ABS has a framework for gauging education and training statistics, these are not outcomes of learning. The Department of Education, Science and Training outcome framework for Indigenous people is useful for detailing that client group, while the Clemans et al. (2003) framework provides a means of integrating the outcomes and evidence about ACE and, we suggest, VET, the latter point to be tested in this study;

✧ There is evidence from the literature that VET in Australia has made a great impact on other sectors of the post-compulsory learning field, for example, in schools where the VET-in-Schools provision is due for yet another large expansion through the 24 new national technical colleges, through the approximately 75 per cent of ACE provision that is now VET-based, and through the national provision of adult literacy and numeracy programs which are now heavily VET-oriented and resourced. The latter indications of VET's expansion in Australia have been in themselves, the evidence suggests, partly achieved through partnerships – between ANTA, NCVER and DEST, all of the above with state and territory governments and so on. The leverage for VET's successful expansion has been the strong accreditation frameworks and related attached resourcing.

It is apparent that learning outcomes will be better served and engaged in 'communities of learners' where the outcomes are not confined, or sought, in only one or two domains (such as economic or social). Instead, it is important to undo both the perception (and at times the actual) barriers that learning activities (be they VET or ACE) are only or mainly concerned with a particular outcome. Partnerships can bring together the strengths of both fields to better serve multiple outcomes.

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