



## Aspects of training that meet Indigenous Australians' aspirations: A systematic review of research

*Cydde Miller*

National Centre for  
Vocational Education Research

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# Aspects of training that meet Indigenous Australians' aspirations

A systematic review of research

*Cydde Miller*

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The views and opinions expressed in this document are those of the author/project team  
and do not necessarily reflect the views of the Australian Government  
or state and territory governments

## Publisher's note

Additional information relating to this research is available in *Aspects of training that meet Indigenous Australians' aspirations: A systematic review of research—Support document*. It can be accessed from NCVER's website <<http://www.ncver.edu.au>>.

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A systematic review of research identifies, critically appraises and synthesises relevant research on a specific topic in order to find the answer to a given question.

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# Key messages

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This systematic review of research provides evidence to enable vocational education and training (VET) policy-makers and practitioners to act and move forward in developing training that meets the aspirations and needs of Indigenous<sup>1</sup> Australians.

- ✧ Through a systematic review of existing research, clear evidence has been found that seven key factors lead to positive and improved outcomes for Indigenous Australians as a result of vocational education and training. These are:
  - ◆ community ownership and involvement
  - ◆ the incorporation of Indigenous identities, cultures, knowledge and values
  - ◆ the establishment of ‘true’ partnerships
  - ◆ flexibility in course design, content and delivery
  - ◆ quality staff and committed advocacy
  - ◆ extensive student support services
  - ◆ appropriate funding that allows for sustainability.
- ✧ Training built on all seven of these factors will lead to outcomes from VET that Indigenous Australians aspire to, including skills for self-development, employment, community development and self-determination. The absence of any one of these will lessen the likelihood of positive outcomes.
- ✧ This set of critical factors must be observed, regardless of context, time and place. Indigenous communities and cultures in Australia are diverse; consequently there can be no single approach to providing education and training. The high level of diversity has been one of the challenges of this systematic review, but this has also enabled the generation of a set of overarching criteria for success in any and all circumstances.
- ✧ These seven factors should form the basis for program planning, design and evaluation. They are already linked with the charter developed by TAFE Directors Australia for Indigenous education and training, which has been designed to guide future activity in technical and further education (TAFE) institutes across the country.

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<sup>1</sup> The term ‘Indigenous’ refers to Australian Aboriginal and Torres Strait Islander people, unless otherwise specified. Other location-specific terms used include Koori (Victoria), Maori (New Zealand) and First Nations (Canada).

# Executive summary

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This systematic review of research provides evidence to enable vocational education and training (VET) policy-makers and practitioners to act and move forward in developing training that meets the aspirations and needs of Indigenous Australians.<sup>2</sup>

The project forms part of a coordinated program of research developed by the National Centre for Vocational Education Research (NCVER) in partnership with the former Australian Indigenous Training Advisory Council (NCVER & Australian Indigenous Training Advisory Council 2004) to address the four objectives of the national Aboriginal and Torres Strait Islander VET strategy for 2000–05, *Partners in a learning culture* (ANTA 2000a).

Progress against the objectives expressed in *Partners in a learning culture* was assessed during a mid-term review in 2003 (Kemmis et al. 2004). Objective 3 of the strategy is concerned with ‘achieving increased, culturally appropriate, and flexibly delivered training, including use of information technology, for Indigenous people’ (ANTA 2000a). The mid-term review found that practice and research relating to this objective since 2000 had been focused on the use of information technology in training.

This study was therefore intended as a stocktake of research on good practice in culturally appropriate VET and adult and community education (ACE) for Indigenous Australians. New research was not commissioned because it was agreed that a significant existing body of research was available. This required careful and systematic evaluation to draw out the necessary factors which would enable Indigenous Australians to achieve positive outcomes from VET.

## How we did it

We began by developing the following question to be answered through a systematic review:

For Indigenous Australians, what are the key features required in the planning, design and delivery of VET and ACE learning programs to ensure positive educational, employment and social outcomes?

This systematic review seeks to answer this question by exhaustively searching for all available research, in this case over the last ten years, using keywords implied by the research question. Abstracts are used to identify potentially relevant studies for selection. Selected studies are then evaluated in detail for findings relevant to the question; the quality of the research itself is also evaluated. High-quality and highly relevant studies are then synthesised to generate a comprehensive evidence base.

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<sup>2</sup> The term ‘Indigenous’ refers to Australian Aboriginal and Torres Strait Islander people, unless otherwise specified. Other location-specific terms used include Koori (Victoria), Maori (New Zealand) and First Nations (Canada).

For this review, we would like to thank the 11 external researchers, several National Centre for Vocational Education Research (NCVER) staff and the Australian Indigenous Training Advisory Council for their contributions (see appendix A). More detail on the process undertaken for this review can be found in Anlezark, Dawe and Hayman (2005).

## What are the outcomes Indigenous Australians aspire to?

The outcomes Indigenous people aspire to through training include, from the foundations upwards, the development of personal skills, educational achievements, 'employment' and the development of their communities.

These outcomes are discussed within most of the studies reviewed, and confirmed in the recent NCVER survey of Indigenous VET students (Butler et al., forthcoming).

### Personal outcomes

The personal outcomes Indigenous Australians aspire to and obtain through training are the most critical. These types of outcomes include:

- ✧ enhanced self-confidence and self-esteem
- ✧ improved communication skills
- ✧ feelings of being respected by others within the community.

Such outcomes are the enabling factors for achieving other positive outcomes detailed below.

### Educational outcomes

Indigenous Australians participate at high rates in VET, but more in lower-level courses, and many do not complete them. The educational outcomes people aspire to include:

- ✧ improved subject and course completions
- ✧ movement to further study at higher levels of VET and/or university that are more likely to result directly in employment.

Educational participation and outcomes are the intermediate steps towards gaining employability skills, employment itself, supporting community development, and fulfilling personal goals.

### 'Employment' outcomes: paid work, community development and Indigenous enterprises

The ultimate outcomes from training sought by Indigenous Australians are employment and community development. However, public and private paid employment is generally limited in rural and remote areas where labour markets are small. Indigenous people undertake significant amounts of relevant and time-consuming unpaid and community work which is not recognised as 'employment' in labour market statistics. Thus, the types of 'employment' outcomes people aspire to include:

- ✧ paid employment, especially in government and Indigenous organisations
- ✧ participation in the Community Development Employment Projects scheme
- ✧ development of Indigenous enterprises, stronger communities and economic independence.

This systematic review finds strong evidence that there is a great deal of work to be done for these outcomes to be fully recognised and incorporated into VET policy and provider practices.

## What are the required factors to achieve positive outcomes?

If these are the desired outcomes, how can VET and ACE policies and programs better facilitate their achievement? This systematic review has found there are seven critical factors required to ensure that positive outcomes are achieved in any context.

### Community ownership and involvement

There is unequivocal evidence that the single most important factor in achieving positive outcomes is Indigenous community ownership and involvement in the training from start to finish. The more control and authority a community has in its training, the more successful that training will be. At present, ownership and involvement are diverse in meaning and practice, and applied to varying degrees across Australia—from minimal involvement in mainstream programs to high-level and ongoing involvement in Indigenous-specific courses and Indigenous-controlled training providers.

### Indigenous identities, cultures, knowledge and values

Training needs to reaffirm students' own identities, cultures and histories to provide the appropriate space in which people can acquire skills for employment, community development and self-determination. Participation in education and training is a social activity, and as such must be negotiated between students and teachers to ensure that the structures, environment and content are congruent with Indigenous backgrounds.

### True partnerships

The development of 'true' partnerships is essential, as they establish a process through which Indigenous community aspirations can be incorporated within VET provider, industry and government priorities. Partnerships involve joining up with organisations, within communities and with external parties, which have the professional, financial and structural means to assist Indigenous communities to meet their aspirations. These types of partnerships can reduce duplication of services and wastage of effort.

### Flexibility in course design, content and delivery

The above three factors in turn rely heavily on the flexibility of VET systems, policies, organisations, programs and staff. Flexibility ensures that communities can maintain involvement throughout the training process, that programs can be adapted according to local conditions, and that funding can be more appropriately distributed. Some key aspects of flexibility include:

- ✧ workplace, hands-on and practical course delivery
- ✧ community-based training delivery in rural and remote areas
- ✧ sufficient time to develop programs and respond to change.

The flexibility of individual staff, including teachers and tutors, is also critical. This allows for a responsive training system that adapts to the needs and backgrounds of students.

### Quality staff and committed advocacy

There is clear evidence that program effectiveness is directly affected by the commitment, expertise, understanding and sensitivity of teachers, tutors, support staff and administrators. The evidence also shows a need to appoint and develop more Indigenous people in these roles.

## Student support services

Educational support services, such as tutoring and literacy support, are essential for Indigenous students to start and stay in training, and to achieve positive outcomes. Students must also have access to financial, social and cultural support. Partnerships with various organisations can provide this access using ‘linked up’ services.

## Funding and sustainability

Funding levels must be responsive to the realities of location and requirements, and new initiatives that are effective must be backed up with long-term funding. Flexibility in application and administrative demands must be allowed in instances where funding originates from multiple sources.

## All factors all of the time

This systematic review of research reveals that all of these seven factors, known to improve Indigenous people’s experiences and outcomes from training, must be present in every program.

Additional information relating to this research is available in *Aspects of training that meet Indigenous Australians’ aspirations: A systematic review of research—Support document*, at the NCVET’s website <<http://www.ncver.edu.au>>.

# Introduction

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Good practice needs to be informed by good theory and good research. A major problem for independent Aboriginal community-controlled adult education is that its providers have to work within ‘mainstream’ systems of ‘vocational education and training’ (VET), ‘adult community education’ (ACE) and ‘higher education’ (HE) provision in which both the overall policy context and the administrative and funding arrangements still operate with little reference to over two decades of research and policy debate into Aboriginal education and its relationship to Aboriginal development.

(Boughton & Durnan 1997, p.5)

In 1994, a major review of progress against the National Aboriginal and Torres Strait Islander education policy raised the distinction between *measuring* Indigenous people’s access, participation and outcomes in education and training, and *understanding* whether the training provided resulted in quality experiences and outcomes that Indigenous people and communities had identified themselves (Department of Employment, Education and Training 1994, pp.6–7).

The ten years of research covered in this systematic review show that the national vocational education and training (VET) system in Australia is still challenged by the goal of reaching a suitable balance between pursuing equality for all, and training that is compatible and affirming of Indigenous community aspirations and cultures.

As noted by Boughton and Durnan (1997) above, many of the critical elements of good practice have been reflected throughout years of policy rhetoric, research and evaluation in Indigenous education, but this has not always translated into suitable new models or results.

## The systematic review

This systematic review was undertaken because it was commonly believed that the critical aspects of good practice in VET, according to Indigenous people and their communities, were already known, but that the evidence and factors required systematic identification and careful evaluation.

The project is a central component of the *Indigenous Australians in vocational education and training: National research strategy for 2003–2006* (NCVER & Australian Indigenous Training Advisory Council 2004), which is linked directly to *Partners in a learning culture*, the national Aboriginal and Torres Strait Islander strategy for vocational education and training 2000–05 (ANTA 2000a). The main aim of the research strategy is ‘to ensure that policy development, decision-making and practice in vocational education and training for Indigenous Australians is informed by sound evidence, high-quality data and critical evaluation’ (p.4).

## What is a systematic review?

We originally intended the project to be a stocktake of good practice in culturally appropriate VET delivery for Indigenous Australians. However, as the concept of ‘culturally appropriate’ was difficult to define, and possibly limiting, the National Centre for Vocational Education Research (NCVER) worked with the Australian Indigenous Training Advisory Council to develop the following question to be answered through a systematic review of existing research:

For Indigenous Australians, what are the key features required in the planning, design and delivery of VET and ACE learning programs to ensure positive educational, employment and social outcomes?

By answering this question the aim is to identify a definitive set of critical components to act as guidelines for VET policy and practice in relation to Indigenous Australians, and provide the evidence base from which to develop effective training models.

Systematic reviews were first used in the health sector to draw together evidence from the available research on a particular medical issue or intervention. Rather than focusing on a general topic, the best available evidence is sought and assessed in a systematic way to answer a key policy question. An exhaustive search is undertaken to find published and unpublished research studies of relevance to the review question. The relevant studies are assessed in terms of their quality and whether there is evidence available to answer the question. More detail on the background and process of the NCVER systematic reviews is available in the report, *Aid to undertaking systematic reviews of research in vocational education and training in Australia* (Anlezark, Dawe & Hayman 2005).

Eleven external researchers and six staff from NCVER were involved in this systematic review (see appendix A, which also includes the membership of Australian Indigenous Training Advisory Council). Two reviewers independently assessed each selected study to ensure that bias was minimised in the review process, and they collaborated to produce an agreed rating for the studies against the two overall measures: relevance to the question and quality of the research. The same evaluation template and guidelines were used to ensure as much consistency as possible across reviewers and studies.

## Review methodology

The methodology for a systematic review is based on a clearly specified policy question. Policy-makers and other stakeholders, in this case the Australian Indigenous Training Advisory Council, are involved in defining the review question by focusing on three key components: the *population* (Indigenous people); the *interventions* (the planning, design and delivery of VET and ACE learning programs); and the *outcomes* (educational, employment and social). Once the question is agreed, the details of definitions, keywords, quality appraisal criteria and search strategy are documented (see appendix B, see support document at <<http://www.ncver.edu.au>>).

Based on the initial extensive search carried out for relevant literature, through electronic, web-based and manual sources, over 4000 studies were found. They included primary and secondary research as well as policy reports. Based on their titles or abstracts, the majority were excluded, largely because they were clearly not relevant to the question or were duplicate records. This resulted in the first list of 86 relevant studies. After additional searching and consultation on unpublished materials, the list contained 104 reports.

Following the more detailed assessment of these studies, 67 reports were listed for inclusion in the systematic review. Of these, two were not reviewed: one could not be located and the other was not finished in time. The summaries of all 67 studies are included in appendix C.

## The studies reviewed

Table 1 shows the results for the 65 studies which were appraised according to the five-point scale used to assess both relevance and quality. The numbers highlighted in bold are the 12 core studies used to synthesise the key findings of this review. The 22 studies highlighted in brackets provide supporting evidence for the synthesised findings. Many of the remaining 31 studies are policy documents, opinion-based pieces or short articles without supporting data. Some are also based on outdated data or other sectors of education, which limit their relevance to the review question.

**Table 1: Ratings of the 65 studies reviewed (by ID number)**

Ratings		Weight of evidence B				
		Quality of findings against research questions posed				
		High	Medium+	Medium	Medium-	Low
Weight of evidence A Relevance of substance of the study to the review question	High	<b>4, 45</b>	<b>62, 114</b>	(67), (85)		
	Medium+	<b>48, 94, 103</b>	(38), <b>41, 43</b> , (44), <b>69, 83, 92</b>	(2), (46), (70), (89), (113)		
	Medium	(101)	(11), (77), (79), (95), (106), (107)	(7), (23), 74, 88	(20), 24, 72, 73, 84	19
	Medium-		(86), (108)	22, 82, 93, 96	(40), 76, 98, 111, 112	9, 64, 91
	Low		99, 100, 105	33, 109	68	1, 10, 14, 17, 37, 65, 71

Notes: \* These numbers refer to the random identification numbers assigned to each study. The numbers highlighted in bold are the 12 core studies used to synthesise the key findings of this review.

## Core studies

The 12 core studies in which there is clear evidence to answer the review question are:

**4:** McRae, D, Ainsworth, G, Cumming, J, Hughes, P, Mackay, T, Price, K, Rowland, M, Warhurst, J, Woods, D & Zbar, V 2000, *What works? Explorations in improving outcomes for Indigenous students*, Australian Curriculum Studies Association and National Curriculum Services, Canberra.

This report summarises the results from 83 Indigenous education and training projects (21 relevant to vocational and/or adult education and training) that were funded by the then Commonwealth Department of Education, Training and Youth Affairs in 1998, called Strategic Results Projects. The relevant projects include accredited and non-accredited VET delivery, VET in Schools and other adult education. Collection of data was through individual project reports (completed by providers), visits to the majority of project sites, phone interviews with project coordinators and two conferences in Sydney. Projects cover a range of states/territories and geographic locations in Australia.

**41:** Australian National Training Authority Research Advisory Council 1998, *Djama and VET: Exploring partnerships and practices in the delivery of vocational education and training in rural and remote Aboriginal communities*, research reports, vol.1&2 Northern Territory University Press, Darwin.

Volume 1 comprises a synthesis of data from six case studies in the Northern Territory. Training programs include accredited and unaccredited VET and a variety of delivery methods. Volume 2 contains the detailed case studies, including descriptions of locality, context and specific courses. The study looks specifically at the challenges and successes in developing and delivering remote-area training for Indigenous communities, with a focus on partnerships and community-based delivery.

**43:** Henry, J, Arnott, A, Brabham, W, Clark, T, Ellis, B & Torres, P 1999, *Developing best practice with Indigenous New Apprenticeships*, Commonwealth of Australia, Canberra.

The research for this report involved detailed case studies of five entry-level Indigenous-specific traineeships implemented over the period 1993 to 1998. The case study reports are separate documents with different authors, and the details of these can be found in the reference list. They are located in Cherbourg (Queensland), Sydney (New South Wales), Adelaide (South Australia), Port Augusta (South Australia), and the Kimberley region of Western Australia. The summary report and case studies explore the implementation of innovative approaches to developing and delivering apprenticeships and traineeships for Indigenous Australians.

**45:** Robinson, C & Hughes, P 1999, *Creating a sense of place: Indigenous peoples in vocational education and training*, NCVET, Adelaide.

This study looks at progress in the TAFE sector to 1998 against the National Aboriginal and Torres Strait Islander Education policy from 1990. The report draws on national statistical collections, a review of relevant literature and fieldwork in 16 TAFE institutes (including interviews with staff and a student questionnaire). The project complements study 48 which looks at Indigenous-controlled adult education providers.

**48:** Durnan, D & Boughton, B 1999, *Succeeding against the odds: The outcomes attained by Indigenous students in Aboriginal community-controlled adult education colleges*, NCVET, Adelaide.

This study reports on a survey of 389 students who completed accredited programs in four Aboriginal community-controlled adult education colleges in 1997. The project adhered to an action research approach in which the directors and staff of the colleges had a key role in determining the parameters of the research as well as collecting the data. It shows the comparative outcomes between the Indigenous-controlled providers and the VET system as a whole.

**62:** Department of Education, Training and Youth Affairs (Australian Government), Tasmanian Office of Vocational Education and Training (OVET Tasmania), Small Business Professional Development Best Practice Programme (Australian Government) and Indigenous Business Economic Council (New South Wales) 2000, *Our business, our way: Indigenous perspectives on small business learning—an evaluation of Indigenous projects in the Small Business Professional Development Best Practice Programme*, Office of Vocational Education and Training, Hobart.

This study uses action research principles to evaluate the Indigenous projects incorporated in the Commonwealth Small Business Professional Development Best Practice Programme in 1999. Four projects are evaluated in various locations, including Galiwin'ku (Northern Territory), Cairns (Queensland), Stradbroke Island and the Gold Coast (Queensland), and Sydney and Forster clusters (New South Wales). The focus of the study is on Indigenous businesses identifying and implementing appropriate training for their staff.

**69:** Department of Employment, Education and Training 1994, *On the same level: Case studies of five Aboriginal adult education programs*, Commonwealth of Australia, Canberra.

This study documents five adult education programs focusing on literacy and numeracy issues for Indigenous students, and makes 17 recommendations based on synthesised findings across the studies. The case study sites are Kempsey (New South Wales), Lightning Ridge (New South Wales), Mt Druitt (New South Wales), Ballarat (Victoria) and a statewide distance education program in Tasmania. Methods of data collection include a literature survey, interviews with 219 people (including students, representatives of community organisations, administrators and teachers) and consultations with participants to validate the draft case study reports.

**83:** Spicer, I 1997, *Independent review of the Community Development Employment Projects (CDEP) scheme*, Aboriginal and Torres Strait Islander Commission, Canberra.

This review of the CDEP scheme aims to explore the prospects for improved employment, economic, social and cultural outcomes, including the role that accredited training could play. The study suggests ways for training to be incorporated into CDEP activities, and included consultation with 31 organisations and councils around Australia.

**92:** Saunders, J, Jones, M, Bowman, K, Loveder, P & Brooks, L 2003, *Indigenous people in vocational education and training: A statistical review of progress*, NCVET, Adelaide.

This study shows statistical progress in VET for Indigenous people from 1997 to 2001. It does not show links to education and training interventions, and as such is used to synthesise more detail on the statistically measurable outcomes achieved in and through training.

**94:** Department of Education, Science and Training 2003, *National report to Parliament on Indigenous education and training, 2002*, Commonwealth of Australia, Canberra.

This is the 2002 annual report prepared by the Department of Education, Science and Training to fulfil legislative reporting requirements for the Australian Government's Indigenous education and training programs. Data are collected by the Department of Education, Science and Training from all state and territory education and training departments, as well as from approximately 20 independent and Indigenous-controlled VET providers in Australia (presented separately are data for the preschool, school and higher education sectors). Data are organised according to eight priority areas: literacy; numeracy; educational outcomes; enrolments; Indigenous employment in VET; professional development of Indigenous and non-Indigenous staff; involvement of Indigenous people in decision-making; and the delivery of culturally inclusive curriculum. The data are aggregated and analysed at a national level, in some cases separately for government and non-government VET providers. Some of the outcomes data are drawn from the NCVET National Provider Collection.

**103:** Ball, J & Pence, A 2001a, *First Nations Partnership Programs Generative Curriculum Model: Program evaluation report*, University of Victoria, Canada.

This Canadian study is used to support the findings from Australian research. It uses an action research approach to evaluate seven partnership programs between First Nations Indigenous communities and the University of Victoria (British Columbia, Canada) from 1989 to 1999. The focus is on community capacity-building related to early childhood education, with the communities themselves involved in determining the direction of the research and collection of data, through interviews, questionnaires, focus groups, participant observation and community forums.

**114:** Helme, S, Hill, A, Balatti, J, Mackay, G, Walstab, A, Nicholas, T & Polesel, J 2003 (unpublished), 'Hands on the future: Project for improving access for Indigenous students in VET in Schools programs', Centre for Post-Compulsory Education and Lifelong Learning, University of Melbourne, Melbourne.

This unpublished study prepared for the Australian National Training Authority (ANTA) looks at VET in Schools for young Indigenous students and draws on a literature review, data from a broad national survey conducted in 2002, and interviews with 280 individuals from a variety of schools in all states and territories.

A summary table of these 12 studies describing their research methods, regions and evidence is provided in appendix C, together with details of the 22 supporting and 31 excluded studies.

## Synthesis of findings

The following synthesis combines the data and findings of both the qualitative and quantitative research. The qualitative data are used to *understand* how positive outcomes are achieved, bearing in mind that case studies tend to be highly localised and context-specific. The nationally aggregated quantitative studies balance this by *measuring* selected statistical outcomes.

The core statistical studies (45, 92 and 94) show national-level education and employment outcomes over the period 1989 to 2002. Each of these studies agrees that, while participation in VET has unquestionably increased, progress against other educational measures has occurred slowly. The focus of the studies indicates gaps in data, particularly in relation to the outcomes of unpaid employment, and social and cultural activities. It must be noted that these analyses do not provide conclusive evidence on the factors involved in successful practices.

Five core reports are based on qualitative case study and project evaluation methodology, together presenting detailed information on 41 different education and training programs in a variety of locations and contexts (studies 4, 41, 43, 62 and 69). These studies provide the clearest data on links between the interventions at a local level and the various outcomes achieved as a result of the programs implemented.

The remaining four core studies (48, 83, 103 and 114) are based on mixed-method research, predominantly using interviews, surveys and stakeholder consultations to obtain additional data about the factors involved in achieving positive outcomes for Indigenous students.

# What outcomes from training do Indigenous Australians achieve?

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What this research and policy literature tells us is that best practice Aboriginal adult education providers should be sensitive to and able to accommodate ... distinct and also diverse Aboriginal aspirations and needs, rather than be locked into a restricted view of what constitutes 'legitimate' educational outcomes; and at the very least, best practice involves contributing to both personal and community development goals, as the individuals themselves and the communities define them.

(Boughton & Durnan 1997, p.10)

This chapter explores the range of outcomes that Indigenous Australians achieve through vocational, adult and community education and training, in order to contextualise the interventions and practices that are needed to make them possible.

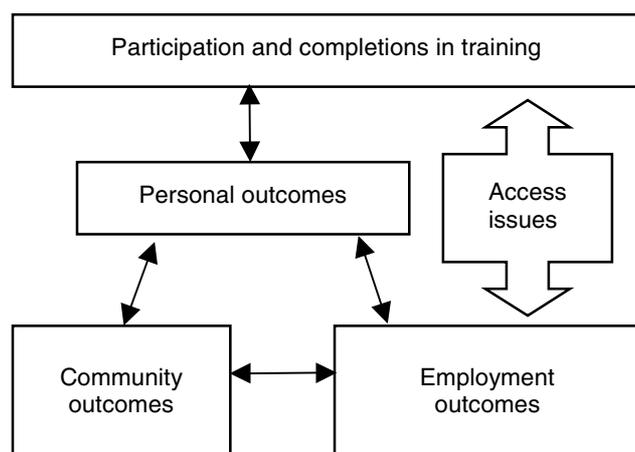
In terms of data collection and analysis, there has traditionally been a focus on statistical measures, such as module completion rates, pass rates, movement to higher-level courses and post-course employment rates. Comparisons are made between Indigenous figures and those of non-Indigenous students as a means of assessing the effectiveness and progress of policies and individual programs, and the extent to which the goal of equity is being achieved.

However, research over the last decade has emphasised that there are many other outcomes that Indigenous people aspire to and achieve through training, and that education and training is about more than getting the same results as all other Australians. While this is clearly an aim of the national Indigenous VET strategy, *Partners in a learning culture* (ANTA 2000a), this review shows that there are fundamental outcomes established by undertaking training, particularly at a personal level for individuals, which facilitate the achievement of other outcomes such as completing a course, moving to other education, getting a job or running a community organisation.

As a result, this analysis begins with a discussion of personal outcomes, followed by education outcomes, and employment and community-related outcomes. This structure best reflects the interrelations between the outcomes from training that are valued by Indigenous Australians.

The analysis also shows there is a gap in the research: the views of people who have not accessed VET before, or who have left without completing, are not explored in any detail. Research in this area could provide crucial information about what prevents people from accessing training.

**Figure 1: Map of outcomes**



The outcomes that Indigenous people want and achieve are explored below from evidence found in the reviewed studies, as well as from evidence that has since become available from the NCVET survey of Indigenous VET students from 2004 (Butler et al., forthcoming) and the update of study 94, the *National report to Parliament on Indigenous education and training, 2003* (Department of Education, Science and Training 2005a).

## Personal outcomes

The systematic review of research reveals that the 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.

In the 2004 survey of Indigenous VET students, about nine in every ten reported that they had improved confidence and self-esteem as a result of undertaking training. At almost equal levels, students found they also had an improved ability to communicate or relate to other people. The next major benefit reported by students was the improved ability to act as a role model in the community (just under seven in ten people).

In the case of students who did not complete their 2003 course and had discontinued their study, the proportions reporting improvements were somewhat lower for each of these benefits (Butler et al., forthcoming).

These findings are reflected in study 103 that looks at a community-based Indigenous early childhood training program in Canada. It shows very high ratings for similar outcomes that were directly attributed by course graduates to participation in the program:

- ✧ enhanced self-confidence—93.2%
- ✧ better communication skills—92.0%
- ✧ feelings of being respected by others—88.9% (Ball & Pence 2001a, p.27).

These personal outcomes are supported by evidence in study 4 across a range of localities and program types. Study 69 finds that students in Indigenous adult literacy and numeracy programs

participated actively in class, including discussions with teachers and community members, developed friends within the class and were able to transfer their skills to helping younger people with literacy and numeracy. It also finds that participants' expectations and aspirations for themselves increased markedly.

Training as an integrated aspect of community business is critical in rural and remote communities and enables the collective development of skills and confidence and pride in local activities and organisations (study 41). This is supported in study 43 which finds in a rural Indigenous community, that a construction industry traineeship trialled between 1994 and 1997:

... has given the community the confidence and skills to embark on a number of other commercial enterprises that are giving rise to training, employment, business and cultural opportunities. These include the construction of a motel, visitor information centre and education and cultural centre. (Ingra & Clark 1998, p.14)

These aspirations and subsequent outcomes at the community level are mirrored in the findings of study 83 that finds some of the most valuable outcomes from the Community Development Employment Projects scheme are the self-esteem and pride developed by participants and whole communities. While the scheme is not a training program itself, critical components of the scheme include skill development activities undertaken through mostly informal learning 'on the job'.

## Educational outcomes

This systematic review finds that Indigenous Australians participate at high rates in VET, and achieve a wide range of education-related outcomes, such as the completion of modules and qualifications, and movement to further education. While improvements have occurred in recent years, some critical gaps remain compared with non-Indigenous students' outcomes.

Educational achievements are the intermediate and intentional steps towards gaining employment, enhancing community development and fulfilling personal goals. Some standard measures of educational attainment include VET participation rates, and module and course completions. Outcomes from VET also include movement into higher-level qualifications and industry-relevant courses, and to other forms of education or training (for example, university).

A number of reviewed studies look specifically at these standard measures, using data sourced primarily from the NCVER National Provider Collection and supplemented with questionnaires based around the same measures (studies 45, 48, 92 and 94). The findings based on NCVER data relate only to publicly funded delivery of vocational education and training. Other studies collect this information at the local level, including most of the projects in study 4. The pertinent facts from the reviewed studies and more recent data are included below.

### Participation rates and level of study

- ✧ Indigenous participation in VET is high and peaked in 2002, with a significant drop in enrolments in government providers in 2003. All other types of providers—Indigenous-controlled, community and other providers—recorded increases in enrolments between 2002 and 2003, continuing a positive trend since 2000 (Department of Education, Science and Training 2005a).
- ✧ Indigenous participation is concentrated in lower levels of the Australian Qualifications Framework, with certificate I and II level courses providing enabling skills such as literacy, numeracy and study skills, and becoming the basis on which students can move to higher levels (Department of Education, Science and Training 2005a).
- ✧ There is a gradual trend towards Indigenous people participating in courses at and above the certificate III level that are more likely to lead to employment-related outcomes, particularly

for Indigenous apprentices and trainees (Department of Education, Science and Training 2005a).

- ✧ Young Indigenous people especially participate at higher rates than young non-Indigenous people (study 94), in addition to VET in Schools programs in Years 11 and 12 (study 114).
- ✧ In remote areas, Indigenous people participate at lower rates and in lower levels compared with those from more accessible areas. Among other factors, this is due to a lack of information, available courses and employment opportunities (studies 92 and 95).
- ✧ In 1998, almost two-thirds of Indigenous students were studying in mainstream VET courses, with the remaining students enrolled in Indigenous-specific programs (study 45). These data have not since been updated.

High participation rates are seen as having achieved the critical goal of ensuring equal access to VET for Indigenous Australians. There are now signs that the number of Indigenous people in training is reaching a plateau, an effect that has been predicted by government VET systems over the last couple of years (Department of Education, Science and Training 2005a, p.62).

Participation in, and availability of, certificate I and II courses are important, especially given that many Indigenous people return to education through the VET system with previously negative, and sometimes short-lived experiences of schooling. However, the aim is to ensure that Indigenous people progressively move into courses at certificate III level and above, which are known to improve employment opportunities (Department of Education, Science and Training 2005a, p.63). It is critical to ensure that Indigenous students remain engaged in the system and are able to access higher-level courses that provide appropriate training and subsequent employment pathways.

## Movement to other education and training

A further educational outcome achieved through positive engagement in training is the movement of Indigenous students into other education and training. For example, many students progress from enabling courses into accredited VET courses, and some from high-level VET courses into university courses. This is a finding across many of the relevant projects included in study 4, as well as studies 11, 46, 62, 67, 77 and 85.

In national-level data, however, increases in Indigenous people studying at higher levels are not occurring significantly. In terms of university commencements, numbers of Indigenous students have also fallen away in recent years (Department of Education, Science and Training 2005b).

## Module completion and withdrawal

- ✧ Module or subject completion rates for Indigenous students have increased steadily to reach 68.8% in 2003. The non-Indigenous completion rate is 81.7% (Department of Education, Science and Training 2005a).
- ✧ Indigenous students in different types of training providers achieve varied results that fluctuate somewhat from year to year, with 'community' providers achieving consistently higher module completion rates than overall non-Indigenous outcomes. 'Indigenous controlled' providers generally have outcomes above the national Indigenous completion rate, but in 2003 this was not the case. 'Government' providers (such as technical and further education [TAFE] institutes, in which most Indigenous students are enrolled) tend to have lower completion rates (Department of Education, Science and Training 2003a; 2005a).
- ✧ Indigenous module withdrawal rates continue to be higher than for non-Indigenous students (Department of Education, Science and Training 2005a), particularly in Indigenous-controlled colleges. This is attributed to the flexible policies of these providers who allow students to

leave training for personal, family and community reasons without recording 'failed' subjects (study 48).

- ✧ The 2004 survey of Indigenous VET students finds that people discontinue training because they are needed in the family, move away or can no longer afford the course. Other reasons people withdraw are because they get a job, that the training is no longer relevant, or that it is too hard or too long (Butler et al., forthcoming).

An example of educational outcomes found in study 4 shows results from two projects focused on re-engaging young Indigenous people with formal education where they had previously been 'lost' from the schooling system and were considered at a high risk of offending. These projects showed an increase in the number of participants, some students becoming eligible for their high school certificates, and high rates of module completion (McRae et al. 2000, p.42).

In another project in study 4, aimed at developing office skills for Indigenous people to find employment in the mining industry, all participants completed at least one module (exceeding the project's targets). Indeed, six students completed between one and ten modules, three students completed ten or more modules, and the remaining five students completed all modules leading to certificate II and certificate III qualifications in business (McRae et al. 2000, pp.345–6).

Increases in participation and module completion rates are also found in studies 41 (remote area delivery), 43 (New Apprenticeships), 67 (adult and community education), 69 (adult literacy and numeracy), 70 (rural training program), 77 (national data analysis from 1989 to 1998), 85 (re-entry courses for women) and 103 (Canadian early childhood programs).

## Paid employment, community development and 'work'

It is difficult to fully quantify employment outcomes achieved through training by Indigenous people. This is predominantly a result of the variable recognition of paid and unpaid employment, the role and scope of the Community Development Employment Projects scheme and different cultural constructions of 'work'.

Another factor influencing employment-related outcomes is the limited nature of labour markets in more isolated areas where larger proportions of Indigenous people live. This has a major bearing on what employment outcomes are possible, regardless of the provision of training.

### Paid employment

- ✧ Based on the 1994 National Aboriginal and Torres Strait Islander Survey (study 79), the key factor determining whether an Indigenous person is employed is the level of educational background.
- ✧ Based on recent NCVER Student Outcomes Surveys of TAFE graduates, the proportion of Indigenous people employed after completing training improved to a similar rate of employment compared with non-Indigenous graduates (Department of Education, Science and Training 2005a, p.70).
- ✧ In remote areas, Indigenous students record the highest pre- and post-course employment rates of over 70%, although this is probably affected by Community Development Employment Projects participation (see below). Indigenous students in metropolitan areas record the greatest increase in employment between starting and finishing training (study 92).

Results from the NCVER Student Outcomes Surveys, on which study 92 is also based, should be treated with caution. The sample includes only a small number of Indigenous respondents and the questionnaire is a self-completed written survey for TAFE graduates. Moreover, the survey does not distinguish one type of 'employment' from another.

It is primarily because of these limitations that NCVET developed the survey of Indigenous VET students—to better ascertain the full range of employment and other outcomes Indigenous Australians aspire to achieve. Results from the survey show that the main employment-related outcome from training was improvement in workplace skills (87%). This was followed by 75% of students who had an increased understanding of how businesses and workplaces run. The proportion of students who reported that training helped them get a job, or change to another job, was lower at 62%. For work-related outcomes, it was found that men benefited more from training than women (Butler et al., forthcoming).

### The Community Development Employment Projects scheme

- ✧ More than 35 000 Indigenous people in Australia participate in the Community Development Employment Projects scheme, a unique program that funds subsidised employment at a slightly higher wage than the dole (Aboriginal and Torres Strait Islander Commission 2005).
- ✧ Based on the 2002 National Aboriginal and Torres Strait Islander Social Survey undertaken by the Australian Bureau of Statistics (ABS), the large majority of Indigenous people employed in non-remote areas are in mainstream jobs. This is compared with about four in ten people in remote areas, with the remaining majority in Community Development Employment Projects (ABS 2004).
- ✧ The 2004 survey of Indigenous VET students was the first major study to make the distinction between Community Development Employment Projects and other paid employment, and shows that 22% of respondents were in this scheme, with 45% in paid work. In some cases, people were participating in both the scheme and paid work (Butler et al., forthcoming).

The inability to distinguish participation in the Community Development Employment Projects scheme from mainstream employment is clearly an issue for all the reviewed studies that deal with statistical employment outcomes from training for Indigenous people, and impacts on the conclusions that can be drawn. Findings regarding employment in different geographic regions must be treated with particular caution.

Study 83, the review of the Community Development Employment Projects scheme from 1997, finds that the best opportunities for employment outside the scheme in remote areas would most effectively be sourced through the establishment and development of local businesses and enterprises. It cites some examples of the scheme where this has occurred, and finds that:

Training is ... seen as important in contributing to the successful outcomes of particular projects, including the development of enterprises, and in enhancing individuals' skills and knowledge which could assist in their own development and to employment outside of the CDEP if desired. (Spicer 1997, p.59)

This is supported by study 107 that looks at adult literacy practices in a remote community in Central Australia. It finds that:

The capacity of a mainstream community to create development and be sustainable is interlinked with its connection to private and public sector employment. In a remote Indigenous community context, this connection with the labour market is nebulous and complex, as unemployment is high, little sustainable industry is apparent and public sector 'employment' is often supported by programs such as the Community Development and Employment Projects. (Kral & Falk 2004, p.20)

Several of the qualitative studies have identified that closer links between Community Development and Employment Projects and formal training activities are required to fully realise community development goals and provide greater chances for mainstream unsubsidised employment (studies 38, 44, 83 and 107).

## Community development and ‘work’

A clear finding of studies 38, 41, 48, 95 and 107 is the need to understand and incorporate different concepts of employment and work-related outcomes linked to training, particularly for discrete Indigenous communities. Educational outcomes and the number of people in paid jobs are important, but a focus on these ignores some of the most critical outcomes that Indigenous people aspire to and see training as facilitating.

This systematic review finds strong evidence that a primary outcome and purpose of training is the support and realisation of community development goals. There is a lot of work to be done for such outcomes to be recognised and incorporated into VET policy and provider practices. This links closely to the role that the Community Development Employment Projects scheme plays in many communities, and raises the question of ‘what to do’ in communities where there is no scheme.

NCVER’s 2004 survey of Indigenous VET students finds that approximately seven in ten respondents claimed that training helped them to develop skills for community-based and voluntary work, and separately become more involved in the community. Students in remote and very remote areas particularly mentioned these benefits (Butler et al., forthcoming).

In rural and remote communities in particular, training operates within a unique context in which its purpose is viewed differently from that of non-remote areas. Study 41 finds that:

VET delivery to Aboriginal communities has struggled with the complexities of community life for providers and clients alike. In particular, VET authorities and providers have found it difficult to adjust the institutional framing of formal training requirements to the realities of community life and cultures, and, as a result, have often failed to achieve resonance with the self-determination priorities of Aboriginal people.

(Australian National Training Authority Research Advisory Council 1998, vol.1, p.2)

Study 107, looking at a remote Central Australian Indigenous community, finds that:

Traditional [land and cultural maintenance] activities are a key feature of this community but are not valued as ‘work’ in any institutionalised sense, for example through the [Community Development Employment Projects]. These activities need to be abridged into a broader system so that they are valued as ‘work’ ... Identifying alternative employment roles, including looking after country and supporting cultural well-being activities, will provide meaningful, purposeful activities for all. (Kral & Falk 2004, p.37)

The evidence across these studies finds that Indigenous communities should have the ability to define ‘work’ in their own communities that will reflect positively when VET programs are evaluated for their effectiveness. The implication is that, from the outset, the funding of VET programs should more accurately reflect the full range of outcomes and aspirations of Indigenous people, not just those linked to providers and industry in terms of student enrolments and paid employment.

By ensuring that the full range of Indigenous aspirations is the impetus and guide for training, improvements in the statistical measures noted above are more likely to result. This includes the individual outcomes such as VET participation and completion rates, mainstream employment and participation in the Community Development Employment Projects scheme, as well as unpaid community, family and cultural work.

## Conclusions

The effectiveness of training for Indigenous Australians should be viewed in a holistic sense, not according to the achievement of very limited, specific and often decontextualised performance indicators. As expressed in study 107:

Most training does not fit the meaning and purpose of community life, and the connection between adult education, vocational education and training and employment pathways is not linked into any future planning processes that take account of community aims and aspirations. (Kral & Falk 2004, p. 35)

This supports the need to develop and implement training as an integrated component of a broader cultural and economic vision established by Indigenous communities themselves.

Vocational education and training is seen as a means to a skilled workforce from an industry-driven perspective, but this does not take into account that people learn for different reasons. The focus on educational and mainstream employment outcomes from VET means that some of the most important needs and aspirations of Indigenous communities are potentially ignored or given less attention. This does not reduce the critical importance of education and employment, as these are major outcomes that Indigenous people expect from training. However, a system that funds and measures 'success' primarily on these indicators might reduce the numbers of Indigenous people accessing the system, and indeed the extent to which the aims of community development and economic independence are achieved. Study 45 notes that:

Each institute needs to take particular steps to build in appropriate monitoring arrangements that do need to quantify performance outcomes and develop particular strategies for addressing poor pass rates and higher attrition. If these strategies are developed properly with the involvement of the Indigenous community, Indigenous education units and the students themselves, then they need not compromise any cultural or social beliefs of the students. (Robinson & Hughes 1999, p.62)

The findings of this review indicate that a balance still needs to be reached between the outcomes that drive policy development, training program delivery and funding, and the priorities and aspirations of Indigenous communities. The next chapter explores the practices and interventions that are shown to achieve this balance most effectively.

# What are the factors required for Indigenous Australians to achieve positive outcomes from training?

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Change happens, but progress is the result of acts of will. (McRae et al. 2000, p.157)

This chapter synthesises findings from the core and supporting studies, and highlights the evidence-based factors that impact on outcomes for Indigenous people in VET and ACE. The factors fall into the following seven themes:

- ✧ community ownership and involvement
- ✧ Indigenous identities, cultures, knowledge and values
- ✧ true partnerships
- ✧ flexibility in course design, content and delivery
- ✧ quality staff and committed advocacy
- ✧ student support services
- ✧ funding and sustainability.

All of these themes and factors are closely interrelated. A number of the reviewed studies find that if the factors from each of the seven themes are incorporated comprehensively into the relevant context, the outcomes achieved by the students will be much greater than if only ‘bits and pieces’ had been applied in an ad hoc way or not at all (see studies 4, 41 and 43).

It must be emphasised that limited or poor implementation of any one of these factors will act as a barrier to the effectiveness of training programs and the achievement of positive outcomes for Indigenous Australians.

## Community ownership and involvement

There is unequivocal evidence that the single most important factor in assisting in the achievement of the full range of positive outcomes from VET for Indigenous students is Indigenous community ownership and involvement. The reviewed studies show that ‘ownership’ is diverse in meaning and practice, and is applied to varying degrees across Australia at present. This systematic review finds that the required factors in community ownership and involvement include:

- ✧ programs established as part of development goals identified by Indigenous community councils, organisations and Elders (for example, health worker and education worker training, art, business and tourism courses)
- ✧ ongoing negotiation of policy, programs, course design, content and delivery with community councils, organisations and Elders, through formal and sustainable partnership arrangements
- ✧ training that is driven and embedded in Indigenous ‘community business’, rather than imposed from external agencies; that is, demand- rather than supply-driven

- ✧ appointment of Indigenous Elders and other community members to Indigenous advisory committees and general VET institute, state, territory and national boards of management in decision-making roles.

Some of the case study projects in study 4 emphasise the need for VET systems and organisations to facilitate local community-driven development, adaptation and guidance of programs. Other projects in the study attribute positive outcomes to planned and ongoing consultation with community members, including the involvement of Elders in delivering appropriate course modules, and engaging local Indigenous mentors.

One model for effecting ownership and involvement in training is found in study 62:

Engender and maintain a sense of community ownership by involving a local sponsor organisation in the design of and planning for the proposed training, including the mode of delivery. Involving participants in determining content enhances prospects for attendance, generates greater acceptance of the training outcomes and assists in ensuring the sustainability of the training.

(Department of Education, Training and Youth Affairs et al. 2000, p.31)

In rural and remote areas especially, training must be embedded within broader community development goals and activities that are determined by the relevant Indigenous councils, organisations and Elders. Building a shared ownership of all aspects of training is one of the key factors that enables effective implementation of most other interventions. This is found clearly in study 43 on Indigenous New Apprenticeships, while study 107 notes in Central Australian health worker programs that:

The community is identifying that if training for employment is to be successful in the long-term, it must work within an evolving model of community control and be relevant to community priorities.

(Kral & Falk 2004, p.46)

Study 41 further emphasises the need for ‘Aboriginal control over all aspects of vocational education and training’, which includes Indigenous involvement, participation and action in the process from start to finish (Australian National Training Authority Research Advisory Council 1998, vol.1, pp.43, 99). Study 107 clarifies the notion of ‘control’ as the community being able to exercise authority:

The Elders, through the health service council, provide the authority structure required for ‘cultural control’ ... This is interpreted as meaning having the right people in the right roles as opposed to a model of community control wherein Indigenous people have to be training to ‘take over’ all aspects of running the community.

(Kral & Falk 2004, p.44)

The effectiveness of training built by community needs is further supported in study 103 from Canada, that finds:

The picture that vividly emerged from the evaluation [of the program] was of a tapestry of interwoven program elements and processes embedded in an actively supported, community-driven agenda. These features most clearly distinguished the First Nations Partnership Programs from other programs of professional training.

(Ball & Pence 2001a, p.24).

Study 62 also emphasises the need for ‘consultation on access and protocols, negotiation over resources, respective roles and responsibilities, and the provision of a feedback mechanism to the community’ (Department of Education, Training and Youth Affairs 2000, p.12). This study finds that students themselves should feel ownership of the programs in which they participate, which occurs in a more iterative way and must be enabled through a flexible curriculum and adaptive teachers. This finding is supported by studies 40 and 69.

## What does it mean in practice?

In all contexts, the formal involvement of Indigenous people in the management and implementation of training programs is predicated on the development of personal relationships and mutual trust, flexibility and localisation of programs. These three factors are found in study 4 to be necessary for positive outcomes to be achieved (McRae et al. 2000, p.168).

Indigenous-controlled providers have boards of management and other advisory groups comprised predominantly of local Indigenous community members. The programs and activities of these providers are embedded in and driven by the needs and aspirations of the communities they service (Boughton & Durnan 1997, p.23).

In mainstream government VET systems, study 106 finds similarly that:

The TAFE institute's capacity to interact effectively with local community contexts in the conduct of its business ... influences the quality of the learning opportunities it offers to the Indigenous students in mainstream programs. (Balatti et al. 2004, p.34)

In the case of TAFE systems, community involvement is often manifested through the establishment of Indigenous advisory committees and the appointment of Indigenous representatives to mainstream boards of management at various levels. Study 94 reports on the numbers of such committees aimed at increased representation of Indigenous people in decision-making roles. The distinction is made between advisory committees at the TAFE institute and provider level, and state-level boards that determine policy directions for the training sector. At a national level, the Australian Indigenous Training Advisory Council operated as an advisory body to the Australian National Training Authority until June 2005. At the time of writing, ANTA functions have been absorbed by Department of Education, Science and Training and a replacement for Australian Indigenous Training Advisory Council has not yet been announced.

In a more recent update of study 94, data show that most TAFE institutes around the country have established an Indigenous advisory committee, and that Indigenous representation on these committees varies from 50% to 100% (Department of Education, Science and Training 2005a, p.71). Study 45 notes with relation to these committees that the majority of their business is concerned with the operation of Indigenous education and support units within the institutes. One of the critical issues raised by study 106 is that anything related to 'Indigenous business' in the TAFE institutes is often referred to the specific institute's Indigenous unit. This was found to have a potentially negative impact on students, the units and the institutes, as it reflects the general unwillingness of mainstream institutes to include Indigenous business across the system as part of their core business. This is despite the fact that a greater proportion of Indigenous students participate in courses delivered by TAFE than for all students.

Study 45 specifically finds that:

While the fieldwork identified ... participation in community affairs as fundamental to the development of relevant course offerings, there was some concern at the lack of integration of such informal community consultation with the formal processes of course design, accreditation, monitoring and evaluation. These processes are usually organised through academic structures which are often not directly linked to the operation of the Indigenous education unit. (Robinson & Hughes 1999, p.55)

Study 103 provides an international perspective that finds:

Being responsive to Indigenous communities means more than letting community members voice their concerns or preferences, more than acknowledging diversity, and more than arranging a welcoming environment on mainstream campuses to accommodate Indigenous students who are able to come to them. (Ball & Pence 2001a, p.55)

The responsiveness that study 103 refers to is reflected in the models of community ownership and involvement found in local Canadian Indigenous organisations which allow adequate time and resources for sustainable community partnerships to be fully and appropriately developed.

## Indigenous identities, cultures, knowledge and values

Participation in education and training is a social activity, and as such must be negotiated cross-culturally to ensure that the structures, environment and content are congruent with Indigenous backgrounds. This systematic review finds that the required factors include:

- ✧ designing policy and programs to reflect, incorporate, support and respond to diverse Indigenous cultures, communities and individuals at the local level
- ✧ acknowledging through training packages and increased recognition of prior learning that Indigenous and western bodies of knowledge and ways of learning are equally relevant
- ✧ starting with an understanding of individuals' backgrounds, needs and aspirations, then negotiating course content and delivery around these foundations
- ✧ recognising that Indigenous people participate in unpaid community and cultural work that is equally as valid and often as time-consuming as paid employment.

The recognition of Indigenous cultures and identities runs hand-in-hand with community ownership of training. As a result, Indigenous perspectives can be integrated in the design, content and delivery of training. However, having Indigenous cultures recognised and incorporated into policies and training programs does not necessarily mean that community ownership has driven the process to ensure its endorsement, local relevance and effectiveness.

For Indigenous controlled providers, study 40 finds that good practice:

... provides space in which the diverse identities of Aboriginal students are acknowledged, affirmed and strengthened, and treated as the essential building blocks from which their education proceeds. It is because of this, in the words of one Aboriginal educator, 'people stand a far better chance of making it ... because they are holding onto their Aboriginality. Their identity, their values, their philosophies hold true'. (Boughton & Durnan 1997, p.19)

Similarly, study 4 finds that:

Cultural support, recognition and acknowledgement can only be achieved by active and effective relationships between Indigenous communities and those who work in schools and training institutions. (McRae et al. 2000, p.8)

### What does it mean in practice?

Training needs to be structured around knowledge-sharing between teachers and students as individuals, which is based on an exchange between Indigenous and western bodies of knowledge and cultures (Marika et al. 2004, p.80). This is expressed as 'both ways' training, in which students' individual and cultural knowledge is valued and incorporated equally alongside the western knowledge that traditionally forms the basis of mainstream course content. This can be implemented through developing components of training that are based on local Indigenous knowledge, in addition to utilising mainstream components capable of being adapted to local situations (Australian National Training Authority Research Advisory Council 1998).

The acknowledgement of individuals' experiences, cultures and backgrounds can be more effectively incorporated through an increased use of recognition of prior learning and credit transfer. Study 92 found, in 2001, that the use of recognition of prior learning for Indigenous students in completing modules was about half that for non-Indigenous students (Saunders et al. 2003, p.7).

## True partnerships

The development of 'true' partnerships is essential to ensuring that training is provided in the most effective and appropriate way for all involved parties. Partnerships can ensure that Indigenous community aspirations are incorporated within provider, industry and government activities and priorities. Effective partnerships enable the sharing of resources between organisations, reducing duplication and wastage of effort. This review finds that the required factors include:

- ✧ establishing flexible and formal partnerships between community organisations, training providers, governments, industry skills councils and employers to link training explicitly to employment and community development
- ✧ establishing flexible and formal partnerships between education and training providers to share resources and reduce duplication of activity and services
- ✧ ensuring that Indigenous communities lead and remain key partners in formal and informal partnership agreements.

The success of partnerships depends heavily on the extent to which community ownership and involvement is incorporated in building and guiding training programs. This means ensuring that the local community is an equal partner throughout the entire process, from identifying the need for training, to design, delivery and assessment of courses (study 4).

Study 41 emphasises that caution must be exercised in negotiating and implementing partnerships. Agreements with communities and organisations might give the impression of a partnership, but can too often result in uneven power relationships and negative experiences by involved parties. The authors stress that partnerships should be formalised and the expectations of all parties made clear through this process from the outset, such that any uncertainties can be quickly resolved on the ground. This is supported by studies 62 and 103.

Partnerships involve collaborative approaches to training programs that facilitate productive links between individual and community aspirations, job opportunities and potential enterprise development. Training should be developed through partnerships that ensure community expectations are incorporated and balanced with industry and employer expectations as well as local businesses and labour markets (Ingra & Clark 1998). This is also found in study 43.

Study 107 finds that when there is a failure of communication or limited attempts to develop partnerships, this has a detrimental effect on the achievement of educational, employment and community outcomes.

All the employment sectors operate essentially autonomously and are not linked to any articulated, shared vision of community aspirations for the future. Health and education offer the main sites for employment, but do not yet co-exist within a commonly shared vision of the potential interrelationship. (Kral & Falk 2004, p.37)

### What does it mean in practice?

Flexibility should be built into any agreements to allow for changes to occur, as not all issues and obstacles can be anticipated from the start. The need to plan as much as possible for all contingencies; for instance, changes in resources, weather and cultural business, must be balanced with the ability to react to other unforeseen issues. Ideally, the formalisation of relationships that are *true* partnerships (not just in name) reduces the need for a system that is reactive and deficit-focused.

Study 103 from Canada provides a guide on the appropriate development of partnerships:

- ✧ Tolerate high levels of uncertainty and shared control of the program.

- ✧ Clarify and confirm informally, and later formally, agreement about the ‘mission’ of the partnership and the core elements of the program.
- ✧ Make a long-term commitment and persevere.
- ✧ Respond to expressions of community needs regarding program implementation with a high level of flexibility. Post-secondary partners need to be self-critical and willing to jettison the ‘excess baggage’ of their institutions and work around some of the constraints of their institutions.
- ✧ Become familiar with the priorities, practices and circumstances of the community, without becoming involved in them (in the First Nations Partnership Programs, the post-secondary partners did not seek or presume to become experts or insiders of the cultures or social life of the community partners).
- ✧ Assume an encouraging, non-directive stance while waiting.
- ✧ Avoid ‘doing’ when non-action would be more productive of community agency and, ultimately, capacity-building.
- ✧ Be receptive to what the community brings to the project, although these contributions may come in unfamiliar forms and at unexpected times (Ball & Pence 2001a, p.56).

Study 41 specifically addresses the issue of partnerships involving Aboriginal communities in rural and remote areas. One example of an established partnership from the study showed the complexities and benefits of working between a community health clinic, the government health department, and an Indigenous training provider.

Study 106 finds that building relationships within organisations is also important, especially in TAFE institutes where Indigenous students may form a small proportion of the total student population in mainstream courses. In such instances, this study finds that Indigenous issues are frequently shifted to the Indigenous academic or support unit. It concludes that:

Current organisational design requires critique for its capacity to encourage effective inter-team, inter-unit and inter-department collaboration and knowledge sharing ... Commonly shared understandings across the institution are a pre-requisite to attaining the collaboration needed to effectively service Indigenous students, especially when new models of delivery such as community-based delivery are being used.

(Balatti et al. 2004, pp.32–3)

A great deal of research and practice over the last ten years has seen reference to and reliance on the Aboriginal and Torres Strait Islander Commission as a key partner, especially in relation to the Community Development Employment Projects scheme, business development and other areas beyond the scope of education and training that impact on outcomes. The abolition of the Aboriginal and Torres Strait Islander Commission and subsequent arrangements in Australian Indigenous affairs will have a significant bearing on practices in this area, particularly in light of the need to establish and maintain partnerships across various organisations and sectors.

## Flexibility in course design, content and delivery

Flexibility is a necessary condition of training systems, policies, organisations, programs and teachers to *enable* positive and improved outcomes. This systematic review finds that the required factors include:

- ✧ flexible systems, policies, programs and funding that will allow the negotiation and refinement of training at all stages of the process
- ✧ training programs that are able to evolve and change with community development goals, and are evaluated according to their relevance and effectiveness for communities

- ✧ training located within the workplace and which is practical, in the context of paid employment, apprenticeships, the Community Development Employment Projects scheme and community settings
- ✧ in rural and remote areas, training that is primarily community-based to reduce the need for people to leave their communities
- ✧ adequate time provided to develop policy and programs through well-developed partnerships and planning.

The most effective training programs are found to be those built through negotiation between communities, teachers and students. The negotiation of curriculum and delivery is an iterative process between parties and is predicated on a flexible system. A significant factor in achieving positive outcomes is the extent to which local issues and contexts are integrated within the course content and delivery. This links very closely to the relevance of training at a community level in particular, and to the awareness and quality of staff. Study 4 finds that:

Flexibility is ... evident in the inventiveness and creativity displayed in personal professional responses to the detail of issues as they arise in individual student cases. This may be the form of flexibility which has the most far-reaching consequences, and requires a level of cross-cultural awareness, as well as personal and professional empathy.

(McRae et al. 2000, p.170)

The relevance of training is essential, and links closely to community ownership, as this establishes a culturally and personally familiar context in which individuals can engage. Training is relevant if it is directly aligned with community development goals, with designated paid employment and other work, and with personal motivations for undertaking education.

A critical factor that often works to the disadvantage of training providers, students and communities is the limited time allowed to properly plan, develop and implement a specific training program. Study 4 finds that this is one of the main difficulties reported from the Strategic Results Projects, especially the short timelines required for project development and implementation, and the timing of funding distribution (McRae et al 2000, p.6).

Study 62 provides a detailed account of the various steps involved in developing an effective training program for Indigenous students in small business which emphasises the need for adequate allowance of time to ensure the training is endorsed by the local community.

Study 103 also finds that the effective partnership arrangements for developing a community-based training program in western Canada took between one and five years in lead-up time (Ball & Pence 2001a, p.19). The time spent establishing effective and sustainable partnerships with communities and other organisations means that the ongoing negotiation of training programs does not require new effort every time.

## What does it mean in practice?

Study 43 on New Apprenticeships finds that Indigenous-specific training materials and resources are crucial to ensure that training is accepted, relevant and effective. It notes that the move to training packages in Australia in the late 1990s provided a potential for Indigenous knowledges and local circumstances to be incorporated into training delivery with the support of such resources (Henry et al. 1999, p.22). However, study 23 finds from the mid-term review of *Partners in a learning culture* undertaken in 2003, that the industry-driven nature of training packages has frequently resulted in a large amount of resource-intensive revision required to ensure relevance and effectiveness for Indigenous communities (Andersen 2003, p.3). Study 23 finds that, in cases where the human and financial resources are not available or committed to adapting training packages, this can have a negative impact on students' perceptions of the

training culture, and thus the likelihood of Indigenous people accessing training and achieving positive outcomes.

Another aspect of flexibility is the way in which competencies are assessed. This needs to balance the requirements of the qualifications system in Australia with the ways in which Indigenous people are most comfortable with knowledge and skills assessment. Some of the critical issues include practical assessment compared with written assessment, and the involvement of community members where Indigenous knowledge is involved. Study 41 notes the need for continuous assessment linked to on-the-job and work-based training, rather than abstract point-in-time assessment in a formal classroom context (Australian National Training Authority Research Advisory Council 1998, vol.1, p.44).

Where training is developed and expected to contribute to community development goals, the training itself should include components of Indigenous knowledge that must be developed and assessed by local Elders and other community members. This is found to be critical in the Indigenous-controlled providers in study 40 (Boughton & Durnan 1997, p.21).

## Workplace, hands-on and practical course delivery

Training that is delivered in a practical or workplace setting, and that allows learning-by-doing is found to be an effective strategy in achieving positive outcomes for Indigenous students. Study 4 finds that this is an important component in the success of many of its case studies. It is also critical in certain professions, such as Aboriginal health worker training (studies 41 and 107), agricultural production (study 70), and radio broadcasting (study 89). Young people in schools are also found to benefit greatly from this mode of training delivery (study 114).

Study 41 finds that:

If there is not a high degree of correspondence between the content of a course to be provided to the community and a targeted work area given meaning, status, worth and value within the culture and development agenda of that community, then the course will have nothing with which to really connect. The training will, probably, be seen as having no real value by the community and therefore be ineffective.

(Australian National Training Authority Research Advisory Council 1998, vol.1, p.47)

Training that is physically and theoretically located within the workplace of both paid employment and community work is found to increase the chances of achieving the full range of positive outcomes. Study 43 finds that the effectiveness of New Apprenticeships relies heavily on the balance between work-based learning and off-the-job training, as well as the links to community business.

Study 62 finds that Indigenous students prefer group work in which people are able to support each other. This is in contrast to a focus on individual learning. This should not be confused with one-on-one interaction between teacher and student, which is highly valued by Indigenous participants. Where teamwork can be built, self-esteem and confidence are strengthened and other positive outcomes result (Department of Education Training and Youth Affairs 2000, p.12). This is supported by study 45 that finds:

Students who responded to the questionnaire in this study were fairly consistent in preferring group work over individual study and lecture formats, partly because of peer support which they saw as culturally important. (Robinson & Hughes 1999, p.59)

One of the accredited VET projects in study 4 emphasises that:

[the Construction Fitout and Finish program] ... involved the students not only in directed learning, but in actual on-the-job training and experience in a community project of considerable cultural significance. What's more, by the end of the project there was a

product in the form of a building that will continue to exist as a testament to the work of the students and to the program as a whole. (McRae et al. 2000, p.127)

Study 38 finds that a balance can be established to ensure relevance of training for communities, industry and governments.

Recognition of local patterns of economic and cultural activity will facilitate community and industry collaboration which offers major benefits for students, their families and communities, as well as being a contribution to the accountability framework for both state or territory government and Commonwealth Government stakeholders.

(Marika et al. 2004, p.84)

This is linked by the authors of the study to an expansion of the measures used to determine program effectiveness, and thus funding and resource support, in the context of training that has multiple purposes.

## Community-based training delivery

Community-based delivery is particularly relevant in remote and isolated communities where access to education and training is limited, and the main choice historically has been to leave the community to seek such opportunities in larger towns and cities. Training is a critical means through which people can establish the confidence to go outside the community to participate in further education and employment. It follows that any course designed for people in such areas should at least start to build these skills through community-based delivery.

Studies 41 and 38 extensively address the positive and challenging aspects of community-based delivery of training, while study 106 finds that:

Owing to the training being delivered to the home communities of Indigenous students, successful completions have increased in the two sites where this form of delivery was studied. Another positive outcome of community-based training was the increased readiness of some students to experience training and/or work in larger centres—a prospect that would have proved daunting previously. Success in vocational education and training at home had increased the confidence of students to reach out and experience new learning and work environments. (Balatti et al. 2004, p. 23)

Ball and Pence (2001b) further explore community-based delivery of mainstream courses, finding that locating generic training in communities is not sufficient. They emphasise that:

Making a program geographically accessible does nothing, in itself, to increase the resonance and applicability of professional training to the culture, rural circumstances, socioeconomic conditions, unique goals and resources of Aboriginal communities, unless the program is reconceptualised to respond to these needs and conditions.

(Ball & Pence 2001b, pp.3–4)

Another benefit of community-based delivery of training is that it has the potential to provide paid and unpaid employment opportunities within communities. If it can be established in a sustainable way with local people trained as trainers, it can form a critical part of a locally developed economy and contribute to broader community development goals.

In support of community-based delivery, study 103 finds that:

The return on investment of post-secondary funds in terms of capacity built to achieve community development goals was nearly 100% superior in the First Nations Partnership Programs compared to the conventional practice of supporting First Nations students to go away for post-secondary training. (Ball & Pence 2001a, p.24)

In study 106 on mainstream TAFE institutes, one of the case studies found that students traditionally had to leave the Torres Strait to travel to the Tropical North Queensland TAFE campus in Cairns for seven weeks at a time.

As well as accommodation and travel difficulties, many of the apprentices experienced homesickness and culture shock. (Balatti et al. 2004, p.70)

Added to students' negative experiences of the training itself, including different teachers who generally lacked awareness of the Torres Strait and isolation as a minority within class groups, these factors resulted in a 'very high drop-out rate and community dissatisfaction' (Balatti et al. 2004, p.70). In light of these problems, the case study used action research principles to trial and evaluate the community-based delivery of apprenticeships in the Torres Strait. The program employed one trainer to deliver all community-based curriculum, which enabled peer mentoring, team building and the development of rapport with students and the community. As a result, the program saw a high retention rate of over 90% by the end of the research.

## Quality staff and committed advocacy

There is indisputable evidence that program effectiveness is linked directly to the commitment, expertise, understanding and sensitivity of people involved throughout the training system and process. This includes people as teachers, tutors, support officers, administrators, policy-makers and funding providers in governments and industry, and with employers, training providers and communities. This systematic review finds that the required factors include:

- ✧ employment and development of staff to understand and incorporate Indigenous backgrounds, cultures, experiences, skills and aspirations into policy, programs, course content, delivery and assessment through negotiation with students and peak bodies
- ✧ employment and development of staff to build strong rapport and relationships, and interact with their students and local communities in mutually respectful, open, responsive, friendly and sensitive ways
- ✧ the professional expertise, awareness and commitment of all people who work with and for Indigenous students and communities, in training organisations, government departments, industry bodies and employers
- ✧ appointment and development of more Indigenous teachers, mentors, leaders, administrators, researchers and other staff.

Study 43 highlights the important role that 'committed advocates' have in establishing, developing and sustaining an effective training program, in this case, Indigenous-specific apprenticeships (Henry et al. 1999, p.26). This is also demonstrated in study 41 (Australian National Training Authority Research Advisory Council 1998, vol.1, p.83), while study 4 finds that:

A major factor in the achievement of the results was that the people involved believed that something could and should be done about the topic chosen. The significance of the will to make improvement is very high. (McRae et al. 2000, p.7)

At the local level, study 62 finds that 'the selection of key personnel (trainers/facilitators/managers) is critical. They must be able to:

- ✧ negotiate
- ✧ observe the protocols
- ✧ be flexible, and
- ✧ identify the participant/community needs (Department of Education, Training and Youth Affairs et al. 2000, p.11).

Specifically in relation to teachers, study 106 finds that:

Successful programs require excellent multi-skilled teachers who are competent in their vocational knowledge, the fundamentals of good teaching practice and cross-cultural communication. Depending on the context in which they are teaching, many other skills may be required. For example, trainers delivering on-site training in Indigenous communities may be required to educate, in appropriate ways, stakeholders in the community other than the students. (Balatti et al. 2004, p.24)

Study 4 provides further weight to this evidence across several training projects, in addition to early childhood and schooling situations, in finding that '[t]he development of [students'] requisite skills will evolve from teachers' high expectations of students and the skill and, especially, sensitivity with which they approach their work' (McRae et al. 2000, p.167).

## What does it mean in practice?

Study 94 notes that Indigenous-controlled and some other independent VET providers have higher rates of Indigenous employment than government providers (TAFE institutes), and tend to employ non-Indigenous staff with an existing background in working with Indigenous students and communities. Often, these providers will have established the practice of providing all new and existing staff with cross-cultural awareness training as a requisite for working in the organisation.

The employment of Indigenous people as teachers, tutors, mentors, leaders, senior public servants, researchers, administrative and support staff is a clear means through which the VET system can more appropriately incorporate community ownership, direction and aspirations. These people provide the crucial cultural link between the daily operations of training programs, the community and the training provider and system (Boughton & Durnan 1997).

Study 4 finds that there is a correlation between the formal involvement of Indigenous people as staff in VET programs, and the success of individual projects (McRae et al. 2000, p.171). This study specifically finds in relation to re-engaging Indigenous people in the education system that:

[Programs] must have a strong and authoritative Indigenous staffing presence, preferably known to and accepted by the community, and active participation from Elders and other influential community members. 'Community ownership' is one way of expressing this. (McRae et al. 2000, p.42)

Study 45 looks in detail at the number of Indigenous staff in TAFE institutes in the late 1990s, while study 94 highlights the most recent data available on Indigenous teaching and other staff across TAFE institutes and some independent providers. These studies find that there is a concentration of Indigenous staff in administrative and support roles within Indigenous units in institutes, with considerably smaller numbers of Indigenous teaching staff. In the independent providers, however, particularly Indigenous-controlled organisations, considerably higher numbers of Indigenous people are employed in both teaching and support roles.

The continuing low numbers of Indigenous teachers and tutors across the system, especially in TAFE institutes, remain a major issue according to various studies (69, 94, 45).

## Cultural awareness and support

Compared with the Indigenous-controlled providers, study 106 finds that there is still a major need for cross-cultural awareness training for all staff in TAFE institutes where Indigenous students are participating in both general and Indigenous-specific courses. The authors find that this type of professional development is required at all levels within the TAFE system, including 'directors, managers, support, administrative and teaching staff' (Balatti et al. 2004, p.33).

Study 94 describes cross-cultural awareness training as covering ‘Indigenous culture, pastoral care strategies, training in delivering Indigenous studies courses, racism awareness and training and reconciliation strategies’ (Department of Education, Science and Training 2003a, p.52). The study finds that, in 2002, there was a drop in the provision of Indigenous cultural awareness training in five out of seven government VET systems, in particular that:

There were indications of an emphasis on training the teachers working on Indigenous specific classes in many institutes as a first priority, before offering training to a wider group of staff. (Department of Education, Science and Training 2003a, p.52)

To avoid the appointment of poor-quality or inappropriate teachers and tutors in TAFE institutes, study 69 recommends that Indigenous communities should have an active role in selecting staff, particularly in Indigenous-specific programs (Department of Employment, Education and Training 1994, p.29).

In the Indigenous education units of TAFE institutes, study 45 finds that students report high levels of satisfaction with the support provided by staff in these units. It identifies ‘the informality, flexibility and cultural sensitivity of staff’ as important (Robinson & Hughes 1999, p.58). Indeed, the authors conclude from their fieldwork and survey that:

Having flexibility in the approach and particular teaching/instructor characteristics [caring attitudes, respectful manner, competence in the subject] are likely to be the most critical determinants of success amongst Indigenous students. (Robinson & Hughes 1999, p.61)

This is further emphasised in study 62 which finds Indigenous students prefer a teaching style and learning environment based on adult learning principles, including teachers who are ‘flexible, informal, inclusive, interactive and friendly’ (Department of Education, Training and Youth Affairs et al. 2000, p.13). Study 69 also finds this the case, noting the essential skills and qualities of teachers for Koori students as understanding, previous experience and appropriate qualifications, flexibility in being able to adapt curriculum for their students, and an openness and receptiveness (Department of Employment, Education and Training 1994, p.29).

## Student support services

The provision of support services by training organisations and their networks of support—including educational, financial, social and cultural support—is essential to ensure that Indigenous people are able to access and remain in training, leading to positive and improved outcomes. This systematic review finds that the required factors include:

- ✧ access to appropriate financial, social, educational and cultural support services that will help Indigenous people enter and stay in training
- ✧ provision of services that link training programs and participants directly with employment opportunities
- ✧ practical literacy and numeracy components built into all courses, with specific support provided when required by individuals’ backgrounds and needs
- ✧ the strengthening and expansion of the role of Indigenous support units in TAFE institutes to ensure they are able to provide support to all Indigenous students and build relationships across all academic and administrative areas of the institutes.

Study 45 identifies that ‘non-academic difficulties’ continue to have a major impact on statistical outcomes measures, such as higher withdrawal rates for Indigenous students. The factors cited include financial and housing problems of students (Robinson & Hughes 1999, p.61). This is further supported by study 46, that finds:

A significant number of difficulties encountered by Aboriginal and Torres Strait Islander students within courses related to personal factors including health, finance and employment, family and community, and accommodation. (McIntyre et al. 1996, p.114)

Study 48 shows a high proportion of students in Indigenous-controlled colleges access ABSTUDY as a financial support for studying (84%), while other support is provided for meeting family, community and cultural obligations, as well as assistance with transport (Durnan & Boughton 1999, p.27). Study 4 notes the importance of cultural support—through mentoring and access to people as role models, along with building a sense of common identity—as a critical factor in the success of many of the Strategic Results Projects.

## What does it mean in practice?

Study 45 finds that, in TAFE institutes and systems, Indigenous units are critical in providing the necessary support for students:

[Indigenous education units] have created welcoming and secure physical and social spaces on campuses. They have enabled many students who lacked self-confidence and skills to be encouraged to access VET programs. (Robinson & Hughes 1999, p.54)

The study finds that these units fulfil a range of roles within institutes, including the development and delivery of Indigenous-specific courses, and in many cases, the delivery of cross-cultural awareness training for institute staff. However, their most important function is the provision of support services for Indigenous students across all courses within a particular institute (Robinson & Hughes 1999, p.44). Such services include cultural, financial, housing and counselling support. Study 45 also notes that assistance is often provided with welfare services, but that there are few programs to assist Indigenous students with seeking or attaining employment. At the time of the study in 1998, linking training directly with employment opportunities was identified as a key area for future efforts. More recently, the 2004 survey of Indigenous VET students found that one of the aspects rated poorly continued to be the availability of assistance to find work during and after training. This is an ongoing area of focus for the revised blueprint for *Partners in a learning culture* beyond 2005 (ANTA 2005).

Existing English literacy and numeracy skills are the most frequently cited barriers to achieving positive outcomes. One of the case studies in study 62 finds that:

The training materials and delivery did not provide for participants with limited literacy and numeracy skills on Stradbroke Island. This led to a number of people withdrawing from the training. (Department of Education, Training and Youth Affairs 2000, p.40)

Many studies, including study 4, find that the most effective way to overcome differences in literacy and numeracy skills of students is to build these components into other delivery. Study 69 emphasises that if specific support is requested, however, it should be available and appropriately tailored to the students' needs. In some cases programs use pre-course assessment to establish student support needs, including in literacy and numeracy, to screen applicants for participation in a particular program (study 4). This screening is mostly employed for higher-level courses in technical fields like health worker training, accounting and business, and in some instances, university preparatory courses.

Study 107 looks at remote delivery of Aboriginal health worker training at Australian Qualifications Framework certificate III level which requires a minimum standard of English literacy and numeracy. It shows that many people do not have the requisite literacy and numeracy skills in communities where Aboriginal health work is one of the only mainstream employment options available.

Study 45 finds that many of the Indigenous education units in TAFE institutes were not reaching or being accessed by a large proportion of Indigenous students who were in general VET

programs (Robinson & Hughes 1999, p.57). Other problems associated with the need to provide support for all Indigenous students in institutes include additional work for Indigenous unit staff who are already stretched to capacity, and the extent to which Indigenous students in mainstream programs are known to the units. The latter in particular is related to poor collection and provision of student data to teachers and different areas of the TAFE institutes, as well as an unquantified propensity for students in mainstream courses to not identify as Indigenous. This raises the problem that a large number of Indigenous students continue to participate in training without the support they require to stay in courses, to complete, and to experience positive educational experiences.

## Funding and sustainability

Funding is a key factor in ensuring that good practices can be fully and appropriately implemented. It frequently operates as a barrier, given the way in which most funding models are found to limit long-term planning. This systematic review finds that the required factors include:

- ✧ recognition of different purposes and philosophical approaches to training between TAFE institutes, Indigenous-controlled and other providers to be reflected in funding models
- ✧ funding that is more flexible in its allocation and application to allow for change and reduce administrative burdens on institutes and individual providers
- ✧ investigation of new ways of funding training that are not based solely on the number of people enrolled or short-term project grants that limit possible activity.

Over ten years ago, the discussion paper preceding the review of the National Aboriginal and Torres Strait Islander education policy identified many issues that had not, to that point, been fully considered in research or policy development. It found that:

Another apparent gap in the literature is any analysis of the tension between depending on government funding (and all the public accountability that entails) and developing community controlled education which embraces a consistent educational philosophy with its own terms of reference. (Department of Employment, Education and Training 1994, p.6)

While this current systematic review identifies some differences in the approaches and outcomes of Indigenous-controlled providers and other systems and organisations, the issue of funding remains unresolved. The same funding formulae, measures and accountability requirements are applied to providers who are very diverse in terms of their modes and fields of delivery, their philosophies of education and their purpose within the context of broader community goals.

## What does it mean in practice?

In relation to VET in Schools programs, study 114 finds that:

Effective and coordinated use of resources is a feature of many of the successful programs through clustering arrangements, maximising the flexibility of funding sources and the entrepreneurial activity of staff in seeking additional funds. However, the uncertainty of the continuation of funding with some one-off grants seen as ‘seed’ funding is an ongoing problem. (Helme et al. 2003, p.34)

Study 106 finds that developers of training programs and policy must recognise the fact that:

Resourcing the change process to generate the appropriate intellectual, cultural and social capital in the organisation needs to better account for what is known about organisational and individual change. Resources involve money, time, personnel, training and support. (Balatti et al. 2004, p.33)

This is found to be an issue not just in Australia, but also in study 103 looking at community-based First Nations programs in Canada. It finds that:

A primary requirement for sustaining and extending the partnership programs is to secure annualized institutional financial support. Perhaps because partnership development and maintenance are not readily measurable, and the training programs are delivered in rural communities where they are not visible on campuses and to potential funders, prospective First Nations communities and post-secondary institutional partners are disadvantaged when advocating for funding. Despite the demonstrated efficacy of the approach, and despite popular rhetoric about extending educational access and cultural relevance, mechanisms for communities and post-secondary institutions to secure dedicated funding for delivering this capacity-building program remain obscure. (Ball & Pence 2001a, p.4)

Study 106 emphasises the problems associated with funding based on annual enrolments, which can result in efforts to get sheer numbers rather than provide the highest quality and most appropriate training. This is supported by study 43 that finds the selective 'recruitment' of Indigenous students is often important in achieving positive outcomes. It notes the difference between enrolling students who are selected in consultation with communities and individuals based on their interests and position, versus bureaucratic drivers of enrolment that see ad hoc processes used to fill student placements (McIntyre et al. 1996, p.25).

Study 108 concludes that:

... a more realistic challenge for the VET system is to find ways to devote more of the considerable resources it expends on Indigenous VET to helping people develop their own regional economic development strategies, and then to acquiring the skills which these strategies demand. This will, of necessity, include learning new ways to negotiate adequate funding and other support from public and private sources.

(Boughton & Durnan 2004, p.68)

The most recent Department of Education, Science and Training report on Indigenous education and training (for 2003) shows a 2.8% drop in the total number of Indigenous people enrolled in VET, based on NCVER data, for the first time since the 1990s (Department of Education, Science and Training 2005a). This has further declined in 2004 according to the latest release of NCVER student data, to similar levels found in 2001 (NCVER 2005). The Australian Government's supplementary annual funding of Indigenous training is based on VET enrolment numbers, which means providers and systems can run in direct competition with each other to secure this funding. The result for independent and Indigenous-controlled providers without major state or territory government support means they are extremely susceptible to short-term resource fluctuations. This can lead to uncertainty in their capacity to deliver high-quality education and training that meets the goals of the strategy for VET for Indigenous people and the goals of governments and of communities.

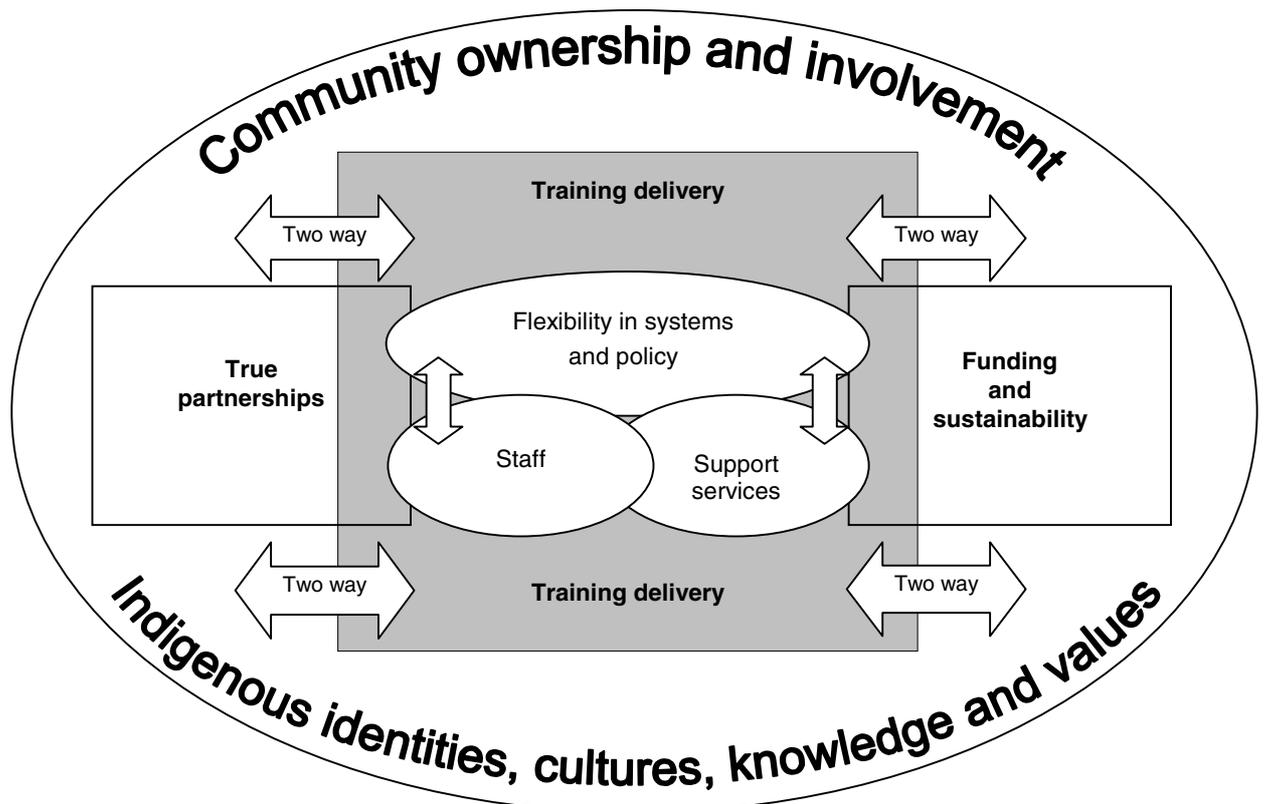
The ways in which states and territories distribute the Australian Government funding they receive, in addition to their own funding for Indigenous education and training, is not clear from the reviewed research. The studies do show, however, that a reliance on 'supplementary' annual funding, in addition to specific short-term project-based funding, has led to a decade of activity that has not translated into significantly improved outcomes for Indigenous people in VET.

# Conclusions

Policy, strategy requirements and equity legislation at Commonwealth and state levels clearly affect the practices adopted at an institute level to service Indigenous students in mainstream programs ... While managers are cognisant of these requirements, the policy discourse seems to be, in the main, absent from the talk of people working directly with students, such as the teachers and Indigenous support officers. (Balatti et al. 2004, p.24)

The evidence found through this systematic review has been used to generate the following principles for policy development and practice. This is not an exhaustive list of the requirements for a training program, but it provides the foundations on which strategic, coordinated and appropriate policy and practice should be established.

**Figure 2: How the seven themes interrelate**



The findings emphasise that teachers, providers, governments and communities do not need to operate from a reactive position. Rather, the implementation of these findings in policy and practice will have a major impact on ensuring that training is undertaken as a planned and

strategic process from the outset. This will unquestionably lead to improved and positive outcomes from training.

People who work at the regional, state, territory and national levels might wonder how they can implement some of these findings, such as community ownership, and might even ask whether they need to worry about issues which seem to be relevant only at the point of delivery. It is perceptibly difficult to achieve many of these findings comprehensively when policy and strategies are attempting to provide for very diverse communities. Policy, program and funding frameworks must be flexible enough to reflect the fact that training delivery has to happen on the ground, driven by Indigenous communities, and that there will always be an interface between students and teachers operating within a much broader system. The challenge for people who do not work at that level is to ensure that the policy and guidelines they develop are able to reflect and involve local communities in local implementation processes.

These findings emphasise that the pursuit of positive outcomes from training is not concerned with achieving the same end point for all. It is about recognising the aspirations of Indigenous individuals and communities, and then evaluating success and effectiveness according to whether those aspirations are realised.

The six priorities identified from the mid-term review of the national Indigenous VET strategy are contained in *Partners in a learning culture: The way forward* (ANTA 2005). They build on the original four objectives of the strategy, and focus policy and grassroots effort for the future into:

- ✧ building the capacity of the VET sector
- ✧ creating more pathways
- ✧ improving funding frameworks
- ✧ ensuring culturally appropriate product development, design and delivery
- ✧ creating links to employment
- ✧ increasing VET sector partnerships.

Through this systematic review we have found that existing evidence clearly supports these priorities, and their effective implementation relies very heavily on community ownership and involvement, along with the commitment and understanding of people employed in the sector. The priorities and review findings emphasise the need to develop, deliver and evaluate training from foundations embedded in Indigenous community aspirations, identities and needs.

We do not want to settle for partial achievement of positive outcomes by picking the factors we think we can do something about, while omitting those that seem too hard—politically, financially or systemically. We want to ensure that the needs and aspirations of Indigenous individuals and communities are fully realised: this set of findings will facilitate this in practice and policy.

## Have we missed anything?

While every effort was made to source relevant research for inclusion in this study, we are aware that there might be some crucial research missing. If you know of any other research or evaluation reports, especially ones you think support or contradict the findings here, please let us know by emailing [ncver@ncver.edu.au](mailto:ncver@ncver.edu.au) or calling 08 8230 8400.

Reports that have recently become available and have not been reviewed include: the phase two mid-term review of *Partners in a learning culture* (Kemmis et al. 2004); the evaluation of the Department of Education, Science and Training Indigenous Youth Partnerships Initiative (Powers and Associates 2003); and a report by Helme et al. (2005) in partnership with the

Victorian Aboriginal Education Association Inc. There is also the main report from the 2004 survey of Indigenous VET students, which fills in some research gaps, especially with regard to the Community Development Employment Projects scheme and training (Butler et al., forthcoming).

It is suggested that readers source the reviewed studies relevant to their interest or focus, to obtain more detail on how to implement these findings in practice. Availability for most of the studies can be found by searching the VOCED database website <<http://www.voced.edu.au>>.

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# Appendix A:

## List of reviewers and contributors

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We would like to thank the following people for their contribution to this systematic review.

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**Sarah Hayman**, Manager, Information Services (left NCVER May 2005)

**Lesley King**, Commercial Projects Coordinator

**Cyde Miller**, Research Officer

**Davinia Woods**, Research Officer

**Susanne Wood**, Project Officer

### Contributors

NCVER worked with the Australian Indigenous Training Advisory Council of the Australian National Training Authority Board (ANTA) to develop the framework for this systematic review, outlined in appendix B. (ANTA ceased operation on 1 July 2005 and its functions were taken over by the Australian Government Department of Education, Science and Training.)

Australian Indigenous Training Advisory Council membership, June 2005

**Bill Wilson** (Co-Chair), Department of Further Education, Employment, Science and Technology, Adelaide

**Leo Akee**, Queensland Government, Thursday Island  
**Aurora Andruska**, Department of Education, Science and Training, Canberra  
**Dave Ella**, New South Wales Aboriginal Education Consultative Group, Sydney  
**Lesley Johnson**, Australian National Training Authority, Brisbane  
**Darcel Moyle**, Australian Education Union, Melbourne  
**Dean O'Neil**, Australian Chamber of Commerce and Industry, Canberra  
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# Appendix B:

## The framework for the systematic review of research

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### Purpose

This paper describes the full evaluation framework required for the systematic review process.

### Review framework

The framework for this systematic review includes:

- ✧ the policy question(s) to be addressed by the review
- ✧ the definitions of the terms in the question(s)
- ✧ the criteria to be used to select research for inclusion in the review
- ✧ the coding to be used for recording the findings from the included studies
- ✧ the criteria for appraising the quality of the included studies.

*All components of the framework must be considered in conjunction with each other when carrying out the review.*

### The policy question

After discussions with the Australian Indigenous Training Advisory Council, NCVET developed the following question to be addressed by this review:

For Indigenous people, what are the key features required in the planning, design and delivery of VET and ACE learning programs to ensure positive educational, employment and social outcomes?

Implied in the review question, and to be reported in the research findings, are various other factors that have an impact on outcomes, particularly those that act as barriers to access, participation and improved outcomes (such as individual attitude, discrimination, health and training costs).

### Definitions of the terms in the question

#### Indigenous people

'Indigenous' includes all Aboriginal and Torres Strait Islander people of Australia, which will be the focus of the review. The term also covers Indigenous people in other countries, such as Canada, New Zealand and the United States, but research will only be included if it is directly relevant.

## VET and ACE programs (all aspects of planning, design and delivery)

- ✧ The review will look at research covering vocational education and training (VET), as well as other less formal learning, such as adult and community education (ACE).
- ✧ The less formal learning must relate to ‘deliberate’ general education or specific activities undertaken to learn new skills or further develop existing skills. This means people knowingly participating in education and training activities.
- ✧ The focus of the review will be to determine what practices in VET and ACE programs have the greatest level of success in terms of delivering educational, employment and social outcomes (as defined in table 2). The research included in the review will be analysed for findings across the full range of program management activities: *planning, design and delivery, including educational and other support services.*
- ✧ The details expected to be of interest are identified in the ‘coding of findings’ section below. Both the findings of the research and its quality will be taken into account in assessing the overall weight of the evidence in the final synthesis report.

## Educational, employment and social outcomes

This will look at:

- ✧ educational attainment; for example, course/qualification completion, module/subject completion, movement to higher-level courses in VET, movement to other education/training
- ✧ employment; for example, acquired a job, improved employment prospects, retained a job/employment duration and promotion in existing job
- ✧ social outcomes; for example, health, family and community development, capacity-building, governance, self-esteem and confidence, reduced incarceration.

## Research selection criteria

The search strategy for relevant research literature will involve hand and electronic searching (databases and websites) to select studies that:

- ✧ are in English (from Australia and overseas)
- ✧ are recent (from approximately the last ten years)
- ✧ are based on empirical research
- ✧ match keywords deemed relevant to the review question.

Note that international research will be included where it is relevant to improving outcomes from education and training for Indigenous peoples.

## Coding of the findings from included studies

Findings from the included studies will be recorded and the studies coded by the reviewers within categories in table 2. Note that more than one code may apply, and more terms may be added as needed to code the studies systematically.

**Table 2: Coding of findings of included studies**

Item	Details
Bibliographic details, including: <ul style="list-style-type: none"> <li>• title</li> <li>• author(s)</li> <li>• publication details</li> <li>• series</li> <li>• url</li> </ul>	Title, author(s), publication date and other relevant bibliographic details
Aims of the research	Brief description of study aims, including research questions and any hypotheses.
<b>Study methodology</b> (proposed and actual) <ul style="list-style-type: none"> <li>• textual description</li> </ul>	Brief textual description of the proposed methodologies for the study. Including details of the sample size, population and coverage.  Any differences between the actual and proposed methods used will be noted.
<b>Geographic location</b> <ul style="list-style-type: none"> <li>• local (Australian)</li> <li>• state (Australian)</li> <li>• national (Australian)</li> <li>• international (one country, not Australia)</li> <li>• international (more than one country)</li> </ul>	Location(s) the study covers
<b>Time period</b> <ul style="list-style-type: none"> <li>• date range, by year/month</li> </ul>	Time period the study covers
<b>Indigenous population</b> <ul style="list-style-type: none"> <li>• Aboriginal</li> <li>• Torres Strait Islander</li> <li>• First nations</li> <li>• Maori</li> </ul> <i>Other terms may be needed, arising from the studies that are included.</i>	Size and nature of the Indigenous population in the study, including any characteristics such as gender, age, employment status etc.
<b>VET and ACE programs</b> (the 6 categories below will be further subdivided, as indicated by the examples) <ul style="list-style-type: none"> <li>• field of study (ASCED)</li> <li>• delivery mode (e.g. on-the-job training, off-the-job training, apprenticeship, traineeship, distance education, e-learning)</li> <li>• provider (e.g. school, TAFE, higher education, adult and community education, private training provider, Indigenous-controlled)</li> <li>• level of qualification (AQF and non-AQF, e.g. non-award, subject only, cert. I–IV, diploma, bachelor degree or higher)</li> <li>• formal/informal</li> <li>• Indigenous-specific or mainstream course</li> </ul> <i>Other terms may be needed, arising from the studies that are included.</i>	Description of VET and ACE programs, to include but not be limited to: education sector, Indigenous-controlled or public provider, formal or informal
Note: ASCED = Australian Standard Classification of Education	

Item	Details
<p><b>Interventions</b> (the 5 categories below will be further subdivided, as indicated by the examples)</p> <ul style="list-style-type: none"> <li>• planning (e.g. training packages, Indigenous participation in decision-making, funding models)</li> <li>• design (e.g. culturally inclusive and appropriate courses, language (bilingual materials), flexible timetabling to allow for cultural obligations, quality course materials)</li> <li>• delivery (e.g. Indigenous teachers/tutors, quality teaching, flexible delivery, learner-focused)</li> <li>• educational support services (e.g. Indigenous units, tutorial assistance, student support officers)</li> <li>• other support services (e.g. childcare, health services, family/community assistance)</li> </ul> <p><i>Other terms may be needed, arising from the studies that are included.</i></p>	<p>Description of planning, design, delivery and support services, to include but not be limited to: flexible delivery, culturally appropriate design and delivery, quality teaching, tutorial and other assistance</p>
<p><b>Outcomes</b> (the 3 categories below will be further subdivided, as indicated by the examples)</p> <ul style="list-style-type: none"> <li>• educational outcomes (e.g. course/qualification completion, module/subject completion, movement to higher-level courses in VET, and movement to other education/training)</li> <li>• employment outcomes (e.g. acquired a job, improved employment prospects, retained a job/employment duration and promotion in existing job)</li> <li>• social outcomes (e.g. health, family and community development, capacity-building, governance, self-esteem and confidence, reduced incarceration)</li> </ul> <p><i>Other terms may be needed, arising from the studies that are included.</i></p>	<p>Description of the outcomes (improved educational, employment and social outcomes) of the VET and ACE programs, and whether positive or negative</p>
<p><b>Barriers or facilitators</b></p> <ul style="list-style-type: none"> <li>• attitudes (personal, peer)</li> <li>• financial circumstances</li> <li>• health</li> <li>• discrimination</li> <li>• access to services (educational and other support)</li> <li>• availability of other educational and employment opportunities</li> <li>• prior educational background</li> <li>• geographic location</li> <li>• existing skills</li> <li>• funding of programs</li> </ul> <p><i>Other terms may be needed, arising from the studies that are included</i></p>	<p>Description of barriers/facilitators (to include how other factors might have impacted on the effectiveness of VET and ACE programs, such as attitudes, financial circumstances, health, availability of alternative careers, or socio-economic context)</p>
<p><b>Expert comment</b></p>	<p>Relevant additional comments, for example, about the context of the study, supplied by a reviewer or other external expert.</p>

## Appraisal of the included studies

To evaluate the studies, there will be two weights of evidence allocated to each study rated on a 5-point Likert scale.

**Weight of evidence A:** Reviewers will rate the *relevance of the particular focus of the study* for addressing the review question (considering the population, intervention and outcomes, as described in this framework, compared with those described in the study).

**Table 3: Assessment criteria for weight of evidence A (relevance)**

Focus	Rating				
Population i.e. Indigenous	High	Medium+	Medium	Medium-	Low
Intervention i.e. planning, design and delivery of VET/ACE learning programs	High	Medium+	Medium	Medium-	Low
Outcomes i.e. positive educational, employment and social outcomes	High	Medium+	Medium	Medium-	Low
<b>Overall weight of evidence A (relevance)</b>	<b>High</b>	<b>Medium+</b>	<b>Medium</b>	<b>Medium-</b>	<b>Low</b>

**Weight of evidence B:** Reviewers will rate the *quality of the study* in terms of the trust that can be put in its findings against the questions posed (considering the rules of evidence criteria: sufficiency, validity, reliability, authenticity and currency).

**Table 4: Assessment criteria for weight of evidence B (quality)**

In this research study	Rating				
Is the evidence valid?	High	Medium+	Medium	Medium-	Low
Is the evidence reliable?	High	Medium+	Medium	Medium-	Low
Is the evidence authentic?	High	Medium+	Medium	Medium-	Low
Is the evidence sufficient?	High	Medium+	Medium	Medium-	Low
Is the evidence current today?	High	Medium+	Medium	Medium-	Low
<b>Overall weight of evidence B (quality)</b>	<b>High</b>	<b>Medium+</b>	<b>Medium</b>	<b>Medium-</b>	<b>Low</b>

Note: Both weighting A (relevance/focus compared with review question) and weighting B (quality/reliability of the findings of the study) will be taken into account in preparing the final synthesis report.

## Reporting

Full reporting will detail:

- ✧ number of studies found in the initial search
- ✧ number of studies excluded, and reasons for exclusion
- ✧ full details of results of appraisals of included studies.

The final synthesis phase will answer the review question by detailing the evidence (and weight) on the features of the planning, design, delivery and support services in VET and ACE programs for Indigenous Australians that lead to improved outcomes. It will state explicitly what key factors work, under what circumstances, and for which subgroups within the overall Indigenous population. The report will also explain barriers and facilitators to success, and detail the implications for policy, practice and research.

## Background

NCVER received funding from the Australian National Training Authority (ANTA) to undertake, for the first time, a systematic review of research for Australian VET policy-makers on a question of policy salience. It was decided this would relate to mature-aged workers.

Objective 3 of *Partners in a learning culture*, the National Indigenous VET strategy 2000–05, is ‘achieving increased culturally appropriate, and flexibly delivered training, including use of information technology for Indigenous people’. The 2003 mid-term review of the blueprint for implementation of the strategy suggests an outstanding need is to explore and identify what constitutes ‘culturally appropriate programs, practices and products’ in urban, rural and remote settings so that training providers and developers of training packages can be more responsive to

the needs of Indigenous people and communities in terms of the design and delivery of VET and ACE.

Towards addressing this issue, the joint NCVER–Australian Indigenous Training Advisory Council Indigenous VET research strategy for 2003–06 includes a *Systematic review of research on culturally appropriate VET for Indigenous people* to be undertaken during 2004 concurrent with the mature-aged worker review. There is much work existing on this topic, and rather than fund new primary research, a secondary review of research and consolidation of good practice will inform the development of practical resources for organisations and teachers when developing programs for Indigenous people.

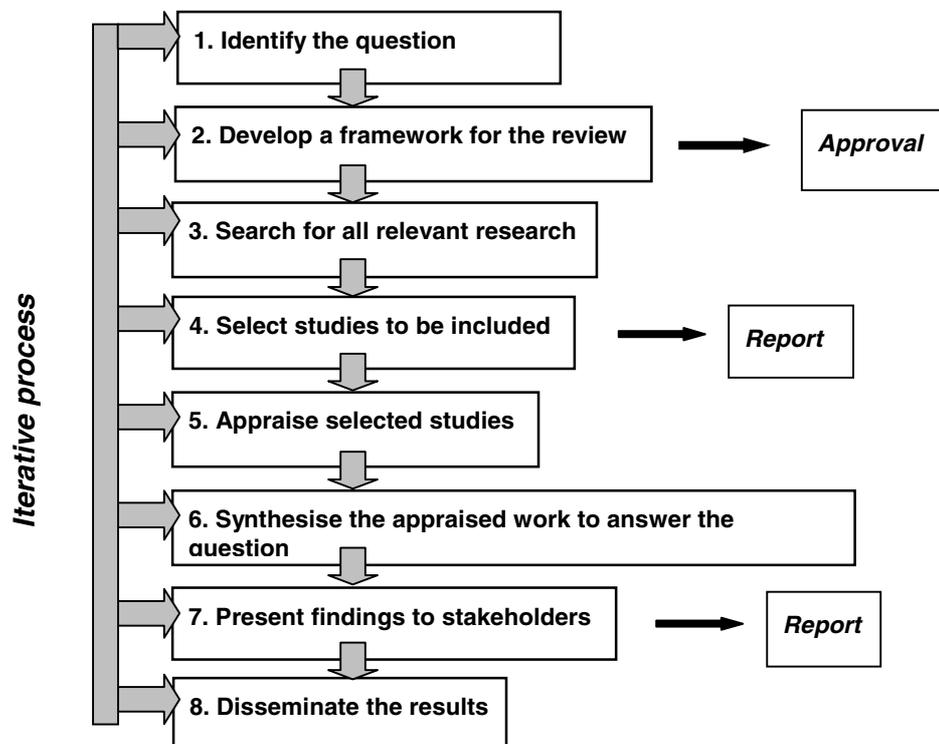
Systematic reviews in the field of education have been undertaken overseas since the late 1990s but this method has not previously been used in Australian education research. In the course of undertaking the reviews, NCVER will also be developing a framework and capabilities for similar reviews.

In undertaking this review, NCVER is seeking an interactive relationship with Australian Government and state and territory policy-makers, and a network of VET researchers throughout the systematic review process. Consultation will ensure that this systematic review of research has current relevance to policy and decision-makers in Australia.

## What does a systematic review of research involve?

A systematic review of research is a secondary research activity that locates all relevant existing material (published and unpublished) on a focused policy question. It evaluates this material for its information content, approach and robustness, concluding with a balanced and relevant synthesis of the findings.

**Figure 3: Summary of the steps of a systematic review**



A systematic review of research follows a structured framework, and is transparent in its approach, making clear the criteria and reasons why a study has or has not been included, and the basis for the judgement of its quality. Thus it provides an empirically based foundation for decision-making.

The United Kingdom-based Evidence for Policy and Practice Information and Coordinating Centre (EPPI-Centre) was established in 1993 to address the need for a systematic approach to the organisation and review of evidence-based work on social interventions. The model of systematic reviewing developed by the EPPI-Centre has been followed and adapted by the Learning and Skills Development Agency in the United Kingdom. In this project, NCVER has adapted the EPPI-Centre and other approaches to suit our purposes. The eight steps for this systematic review are outlined in the following chart.

## Direction of the Indigenous systematic review

Australian Indigenous Training Advisory Council (AITAC)  
(See appendix A)

### *Project personnel:*

Kaye Bowman General Manager, NCVER

Sarah Hayman Manager, Information Services, NCVER (Secretariat)

Cydde Miller Research Officer, NCVER

## Guidelines for systematic review appraisal

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<b>Item:</b>	<b>Weight of evidence A</b>
<b>Criterion A:</b>	<b>How would you rate the relevance of the substance of this study to the review question?</b>
Guidelines:	Consider the following in answering the question above: <ol style="list-style-type: none"> <li>1. Actual population sample covered compared with that specified in the review framework</li> <li>2. Actual intervention(s) covered compared with that specified in the review framework</li> <li>3. Actual outcomes focused on compared with those specified in the review framework</li> </ol>

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<b>Item:</b>	<b>Weight of evidence B</b>
<b>Criterion B:</b>	<b>How would you rate the quality of the study in terms of trust that can be put into its findings for the research question posed?</b>
Guidelines:	Consider all quality criteria as outlined below i.e. validity, reliability, authenticity, sufficiency and currency

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<b>Question 1:</b>	<b><i>Is the evidence in this study valid?</i></b>
Guidelines:	Consider the following in answering the question above: <ol style="list-style-type: none"> <li>1. research aims and variables or concepts measured</li> <li>2. design and whether methods measure what was intended to be measured (i.e. validity)</li> <li>3. efforts made to address the validity of data collection tools/methods e.g. pilot-testing tools</li> <li>4. efforts made at data analysis stage to address validity e.g. limiting analyses where numbers are insufficient</li> <li>5. efforts made in the analysis to control for bias from confounding variables</li> <li>6. whether links between data, interpretation and conclusions are valid</li> <li>7. justification of conclusion drawn</li> </ol>

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*Question 2: Is the evidence in this study reliable?*

Guidelines: Consider the following in answering the question above:

1. efforts to determine that data collection methods and tools will yield same result each time (i.e. are reliable)
2. efforts to ensure data analysis can be repeated and yields same result each time
3. any assumptions/theoretical perspectives that shape the form or the output of the research
4. any alternative explanations for stated findings

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*Question 3: Is the evidence in this study authentic?*

Guidelines: Consider the following in answering the question above:

1. whose voice it is in the report
2. for whom and for what purpose the knowledge was being sought?
3. sources of evidence: direct or indirect?

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*Question 4: Is the evidence in this study sufficient?*

Guidelines: Consider the following in answering the question above:

1. sample sizes etc.
2. the author's conclusions
3. whether there are any other possible explanations for the findings
4. that the evidence presented is enough to support the findings and conclusions

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*Question 5: Is the evidence in this study current today?*

Guidelines: Consider the following in answering the question above:

1. when the study was done and any contextual issues that are no longer relevant or that now are relevant that were not at the time of the study
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# Appendix C:

## The studies selected for review

### Core studies

As a result of the reviewing, 12 studies have been identified as core studies: they meet the criteria for relevance and quality, and provide the clearest evidence in relation to the review question across a range of subgroups of the Indigenous population. Table 5 shows the research methods used, the region of focus for each study, the interventions and the outcomes.

**Table 5: Summary of the 12 core studies**

Study ID	Author	Research methods	Region	Interventions	Outcomes
4	McRae et al. 2000	Project evaluation (21 projects of relevance)	Various (NSW, Vic., Qld, SA, WA, NT)	<p>Various modes of provision are addressed across the areas of planning, design, delivery and student support.</p> <p>Key programs are TAFE, VET in Schools and those in the justice system.</p> <p>Finds that key factors in success are the commitment of personnel, the outcomes focus of the projects and the availability of funding.</p>	<p>The study focuses on educational outcomes such as improved retention, participation and completion rates. Employment and social outcomes are also identified, as are the barriers and facilitators to positive outcomes.</p>
41	Australian National Training Authority Research Advisory Council 1998	Case studies (six)—two volumes	Rural and remote (NT)	<p>Delivered by a range of organisations, including Northern Territory University (now Charles Darwin University), Aboriginal organisations and councils, and other government departments and sectors.</p> <p>Clearly explores all aspects of interventions, including support for students.</p>	<p>The study emphasises the social and cultural aspirations and outcomes of Indigenous communities in the Northern Territory.</p> <p>Educational and employment outcomes (including CDEP) are also described. This looks at the ways in which training fits into community business, and work-related outcomes not often recognised.</p> <p>Barriers include systemic issues, flexibility, literacy and numeracy, remoteness.</p>
43	Henry et al. 1999	Case studies (five)	Various (Qld, NSW, SA, WA)	<p>Apprenticeships and traineeships—Indigenous-specific and mainstream involving TAFE and private providers.</p> <p>Cites the degree of community involvement as a discerning factor between the case studies.</p> <p>Some projects began in 1993, but similarities with the current system are still relevant.</p>	<p>Educational, employment and social outcomes are detailed in each case study.</p> <p>The report also looks at barriers and facilitators.</p>

Study ID	Author	Research methods	Region	Interventions	Outcomes
45	Robinson & Hughes 1999	National data analysis, interviews & surveys, literature review	National	Fieldwork and data cover TAFE provision generally. Planning, design and delivery (including support) are clearly explored.	The study includes detailed analysis of educational outcomes, some employment and social outcomes. The authors note that these outcomes are not directly or causally linked directly to the interventions discussed.
48	Durnan & Boughton 1999	Survey & data analysis	Various (NSW, SA, NT)	Indigenous-controlled adult education providers, although courses include accredited with significant numbers of diploma and above.  Does not explore in detail the characteristics of the providers that may have contributed to the higher outcomes achieved. However, other reviewed studies by these authors provide this detail (linked to studies 40, 86 and 108).	Clearly demonstrates better outcomes for Indigenous students in Indigenous-controlled providers compared with the overall system. The study also identifies different types of outcomes.  Looks specifically at barriers to positive outcomes as well.
62	Department of Education, Training and Youth Affairs et al. 2000	Project evaluation (four)	Various (Qld, NSW, NT)	Mostly delivered by private providers and facilitators, one Indigenous organisation, two projects associated with CDEP.  Detailed exploration of planning, design and delivery of programs. Adult learning principles cited as effective (i.e. building on prior experience and knowledge of learners).  Key personnel are critical, as is their understanding of local cultures/languages—linking new knowledge to familiar examples. Participants must feel ownership.	Key findings against three areas affecting success: planning and project design; project lead-up; and project implementation.  There are also clear findings on barriers/facilitators.
69	Department of Employment, Education and Training 1994	Case studies (five)	Various (NSW, Vic., Tas.)	This study looks specifically at literacy programs for adults, delivered by TAFE, ACE and Indigenous controlled providers.  The study explores all aspects of the interventions.	The study clearly identifies improvements in personal and social outcomes, such as self-esteem and confidence. Some educational outcomes are identified.  Some barriers and facilitators are also mentioned, e.g. support from other students.
83	Spicer 1997	Program review, consultations	National	This study has a component that looks specifically at training separate to CDEP, but the CDEP itself is also treated as a model for training interventions.  Training delivered by CDEPs themselves and by TAFE.	Educational outcomes look particularly at participation in Apprenticeships etc. Outcomes look at the link between CDEP, training and subsequent achievements—focused on transition to mainstream employment beyond the scheme.
92	Saunders et al. 2003	Data analysis	National	Interventions are not explicitly described. This is predominantly a report on statistical outcomes as reported by NCVET.	Focus on historical changes in educational and paid employment outcomes. This study uses the same data as study 94 below.

Study ID	Author	Research methods	Region	Interventions	Outcomes
94	Department of Education, Science and Training 2003	Data analysis (one chapter of relevance—vocational education and training)	National	Interventions by four priority areas: Indigenous staff; professional development; involvement of parents/community; and culturally inclusive curricula.	Deals extensively with the educational outcomes achieved by Indigenous students compared with non-Indigenous students. Some info on employment outcomes.
103	Ball & Pence 2001a	Evaluation—interviews, survey, data analysis, forum, records review	Canada	Delivered in partnership between a university, colleges (training providers) and seven communities.  Extensively explores various aspects of the interventions.	Identifies improvements in educational, employment and social outcomes as a result of the program.  As a high-quality piece of research with clear discussion of outcomes and interventions linked, this provides a good model for both research and training.
114	Helme et al. 2003	Literature review, national survey data and interviews	National	VET in Schools, structured workplace learning and school-based New Apprenticeships.  The study shows the factors that students, teachers and administrators see as important to achieving positive outcomes.	The study aims to look at ways of improving access to VET in Schools for Indigenous students.  It identifies participation and other educational outcomes, as well as some instances of employment and social outcomes.

## Supporting and excluded studies

Evidence from 22 studies has been used to support the findings from the core studies. These supporting studies include single-site case studies and statistical analyses, and some are directly linked to specific core studies. The remaining 31 studies have not been used in this synthesis, on the basis of age, low relevance, limited evidence or poor-quality research.

The following tables summarise the 22 supporting studies (ID numbers in brackets and bold) and 31 excluded studies grouped according to the type of methods used.

**Table 6: Summary of studies based on interviews, surveys and consultations (14 studies)**

Study ID	Authors	Year of study	Research methods	Region	Focus of study
<b>(7)</b>	Skill New Zealand	2001	Hui (workshops) and interviews	New Zealand	VET
<b>(20)</b>	Hubert	2002	Focus groups and interviews	NSW	VET (TAFE, community services)
<b>(40)</b>	Boughton & Durnan	1997	Action research (lit. review, survey, interviews, workshop)	Various	ACE (Indigenous-controlled)
<b>(44)</b>	Senate Employment and Workplace Relations, Small Business and Education References Committee	2000	Senate inquiry (literature review and submissions)	National	All education and training
<b>(46)</b>	McIntyre et al.	1996	Policy review, data analysis and interviews	Various (NSW, Qld, SA, WA, NT)	VET

Study ID	Authors	Year of study	Research methods	Region	Focus of study
73	Department of Employment, Education and Training	1994 & 1995	Discussion paper, consultations, submissions, data analysis	National	All education and training
74	Golding & Volkoff	1999	Longitudinal study (Indigenous as one client group)	National	VET
76	Florisson	2000	Interviews (one site)	WA	VET in Schools
98	Richardson & Cohen-Blanchet	2000	Survey, analysis of policy and practice	Canada	VET and ACE
99	Lund	2000	Survey, analysis of policy and practice	Norway	VET and ACE
(101)	Byam	2002	Evaluation—case studies, interviews, document & lit. review	Canada	Youth/school transition programs
105	Boughton et al.	2004	Data analysis, surveys, focus groups	National	VET (general)
111	Arthur & David-Petero	2000	Survey and data analysis	Torres Strait	All (general)
(113)	ANTA (unpublished)	2002	Interviews and consultations	National	VET (skills gaps in industries)

**Table 7: Summary of studies based on quantitative data analysis (6 studies)**

Study ID	Authors	Year of study	Research methods	Region	Focus of study
22	Schwab & Anderson	1999	Data analysis	National	VET (health sector)
(77)	Robinson & Bamblett	1998	Data analysis	National	All (general)
(79)	Hunter	1996	Data analysis	National	All (general)—employment
93	Junankar & Liu	2003	Data analysis (economic)	National	All (general)
100	Hull	1996	Data analysis	Canada	General post-secondary
109	Aboriginal and Torres Strait Islander Commission	1999	Data analysis (ABSTUDY)	National	VET and higher education

**Table 8: Summary of studies based on project evaluation and case studies (19 studies)**

Study ID	Authors	Year of study	Research methods	Region	Focus of study
(11)	Robertson & Barrera	1999	Policy and literature review, case studies	National	VET (equity groups)
14	Queensland Department of Education and Training	2001	Case studies (three Indigenous)	Queensland	VET (Indigenous and disability)
17	Tierney	2002	Case study (one)	NSW	VET (TAFE)
24	McKinney	1995	Case study (one)	NSW	ACE for CDEP
33	Schwab	1998	Case study (one)	NT	School

Study ID	Authors	Year of study	Research methods	Region	Focus of study
37	Madden	2000	Case study (one)	NSW	CDEP and TAFE
(38)	Marika et al.	2004	Case study (one)	Remote (NT)	Unaccredited VET
64	Construction Training Qld	1997	Evaluation (four sites)	Queensland	VET (building industry)
65	Department of Education, Science and Training	2003b	Evaluation (four sites)	Various (NSW, SA, NT)	VET (Indigenous-controlled)
(67)	NSW Board of Adult and Community Education	1996	Case studies (two)	NSW	ACE
68	Lowe & Tassone	2001	Project evaluation	NSW	School (career aspirations)
(70)	McPherson	1994	Case study (one)	NSW	VET (agricultural)
82	Kearns, Murphy & Villiers	1996	Case study (one)	WA	VET (hospitality)
(85)	Kopusar & Wilson	1997	Case study (one program across various sites)	WA	VET (enabling courses for women)
(89)	Bennett & Edwards	2001	Case study (one)	SA	VET (radio broadcasting)
(95)	Gelade & Stehlik	2004	Lit. review, interviews, case studies	SA	VET
(106)	Balatti et al.	2004	Action research case studies (four) and literature review	Queensland	VET (mainstream, TAFE)
(107)	Kral & Falk	2004	Action research case study (one)	Remote (NT)	ACE (literacy)
112	Schwab	2001	Case studies (three) and data analysis	Various (WA, NSW, Qld)	VET in Schools

**Table 9: Summary of studies based on description, opinion or policy (14 studies)**

Study ID	Authors	Year of study	Research methods	Region	Focus of study
1	Govender	2000	Descriptive overview	NSW	ACE
(2)	Boughton & Durnan (unpublished)	1994	Consultation and policy analysis	National	VET (policy)
9	Bambook	1994	Descriptive overview	National	VET
10	Lester	1994	Descriptive overview	National	VET
19	Queensland Department of Education and Training	2002	Descriptive overview	Queensland	VET (TAFE)
(23)	Andersen	2003	Secondary review analysis	National	VET (training packages)
71	Pitman & Tregambe	1997	Literature overview, surveys and consultations	Victoria	VET (prisons)
72	Aboriginal and Torres Strait Island Peoples' Training Advisory Council	1997	Discussion paper	National	New Apprenticeships

Study ID	Authors	Year of study	Research methods	Region	Focus of study
84	University of Sydney	1996	Literature review and project evaluation	NSW	VET and higher education
(86)	Boughton	1998	Review of research and consultations	National	VET (Indigenous controlled)
88	Jansen et al.	2001	Project implementation and evaluation	New Zealand	VET & higher education (health)
91	Johnson & Herring	2001	Overview of policy and practices (Indigenous subgroup)	National	ACE
96	Malin & Maidment	2003	Literature review and descriptive case studies	National and NT case studies	All education and training
(108)	Boughton & Durnan	2004	Literature review	National	VET (policy)

## The 22 supporting studies

**2:** Boughton, B & Durnan, D 1994, 'Strategic approach to national curriculum development for Aboriginal and Torres Strait Islander vocational education and training', unpublished paper launched at the ANTA Aboriginal and Torres Strait Islander VET Conference, Gold Coast, August 1996.

This report is presented as a collaborative review of Indigenous stakeholder views aiming to identify improvements in curriculum for Aboriginal and Torres Strait Islander people accessing VET. This report was an important step towards developing a national strategic approach to the issue of culturally appropriate curriculum for Indigenous people in Australia. It serves as an historical reference point.

**7:** Skill New Zealand 2001, *Sharing for success: Good practice and issues for Maori education*, Skill New Zealand—Pukenga Aotearoa, Wellington.

This study from New Zealand supports the core studies above, and provides another international perspective on Indigenous education and training. It gives a background of Maori education in New Zealand, noting factors in success, and explores theories related to these positive factors. Practices and theories are shared between Maori providers and other VET providers. While there are notable cultural, political and practical differences, similar principles to the Australian findings are important to highlight.

**11:** Robertson, R & Barrera, S 1999, *Workable solutions: Final report for Australian National Training Authority*, Western Australia Centre for Research for Women, Perth.

This study reports on key factors in positive outcomes across four equity groups: women, Aboriginal and Torres Strait Islander peoples, people with a disability and peoples from non-English speaking backgrounds. It is based on case study data, consultations and a review of literature structured around the system/policy and provider levels separately.

**20:** Hubert, C 2002, *Retaining Aboriginal learners in vocational education and training (Community Services)*, NSW TAFE Commission, Sydney.

This study aims to explore the learning preferences of Indigenous students in Community Services courses at the TAFE NSW Western Institute, and why some students do not complete the courses. It is produced as a handbook for use by all staff in the Western Institute, and reports the research findings in a way that is accessible and practical.

**23:** Andersen, C 2003, *Analysis of Partners in a learning culture: Blueprint for implementation mid-term review reports in relation to training packages and Indigenous stakeholders*, ANTA, Brisbane.

This paper, written by a member of the Australian Indigenous Training Advisory Council, is a synopsis of findings related to training packages from the Phase 1 and Phase 2 mid-term review of the national Indigenous VET strategy. The Phase 1 report was reviewed (study 105) and the Phase 2 report was not available at the time of review. It has since become available and is included in the reference list (Kemmis et al. 2004).

**38:** Marika, B, Lane, C, Smith, H & Reinke, L 2004, 'Working towards an Indigenous training model: Learning from Gamarrwa Nuwul Landcare, Yirrkala', in *Equity in vocational education and training: research readings*, ed. K Bowman, NCVER, Adelaide.

This case study looks at the development of an Indigenous training model in north-east Arnhem Land, Northern Territory. It explores a broader concept of positive outcomes according to community development goals and the meaning of 'work' in remote Indigenous communities. The study specifically supports the findings of core study 41.

**40:** Boughton, B & Durnan, D 1997, *Best practice and benchmarking in Aboriginal community-controlled education*, Federation of Independent Aboriginal Education Providers, Canberra.

This paper is linked directly to core study 48 by the same authors. It provides evidence on the practices of independent Indigenous-controlled training providers that lead to the better outcomes achieved by their students, as identified in study 48.

**44:** Senate Employment, Workplace Relations, Small Business and Education References Committee 2000, *Katu Kalpa: Report on the inquiry into the effectiveness of education and training programs for Indigenous Australians*, Parliament of Australia, Canberra.

This Senate inquiry report looks broadly at education and training for Indigenous people in Australia, and is based on submissions from individuals, organisations and government departments, as well as literature in the field. As such, it has drawn many of its training-related findings from other studies reviewed for this report, including core studies 43, 45 and 48, supporting study 77 and study 73.

**46:** McIntyre, J, Ardler, W, Morley-Warner, T, Solomon, N & Spindler L 1996, *Culture matters: Factors affecting the outcomes of participation in vocational education and training by Australian Indigenous peoples*, University of Technology, Sydney.

This report looks at various factors that impact on Indigenous VET and higher education students, and involved interviews with students and providers in New South Wales, Queensland, South Australia and Western Australia. It is based on the premise that participation in education and training is a cultural activity, and presents evidence on what factors helped participants achieve positive outcomes from their training.

**67:** New South Wales Board of Adult and Community Education 1996, *Making a difference: Model projects in ACE*, NSW Board of Adult and Community Education, Sydney.

This report is based on eight case studies in adult and community education in New South Wales, two of which are Indigenous specific: one on the North Coast of New South Wales and the other in the Dubbo area. These two case studies provide examples of practice and supporting evidence for the synthesised findings.

**70:** McPherson, W 1994, 'Aboriginal and Torres Strait Islander rural training program: A case study of flexible and modular delivery', in *Bulletin of Good Practice in Adult and Community Education*, vol.1, pp.31–4

This case study looks at a training program specifically designed for Aboriginal workers on agricultural properties owned by Indigenous organisations. It briefly presents the program itself and the factors that illustrate its success.

**77:** Robinson, C & Bamblett, L 1998, *Making a difference: The impact of Australia's Indigenous education and training policy*, NCVET, Adelaide.

This study supports the chapter on outcomes, and is related to core study 94. It covers progress against the National Aboriginal and Torres Strait Islander Education policy in very specific outcomes terms, such as participation, course completions and movement to other education or training. There is no information provided on interventions.

**79:** Hunter, B 1996, *The determinants of Indigenous employment outcomes: The importance of education and training*, discussion paper 115, Centre for Aboriginal Economic Policy Research (ANU), Canberra.

This paper analyses data from the 1994 National Aboriginal and Torres Strait Islander Survey to explore what the key factors are in determining the probability of being employed or unemployed. It shows that educational background and attainment is the largest single factor influencing Indigenous employment. As such, this study provides evidence of the link between education and employment outcomes. It does not explore the educational interventions that might lead to improved outcomes.

**85:** Kopusar, P & Wilson, E 1997, *Just enough to tease us: An evaluation of the scope and effectiveness of access programs for Aboriginal women*, ANTA, Brisbane.

This study looks specifically at two training re-entry programs for Aboriginal women in Western Australia. It was designed as a research project based on Aboriginal terms of reference that sought to evaluate the effectiveness of the programs and the factors involved in achieving positive outcomes.

**86:** Boughton, B 1998, *Alternative VET pathways to Indigenous development*, NCVET, Adelaide.

This review of research is to be read in conjunction with core study 48 (see also study 40 above) and provides further evidence of alternative aspirations and objectives of training for Indigenous communities. All the research for this set of reports focusing on Indigenous-controlled providers was conducted during the mid-to-late 1990s by the same author. These providers deliver a blended set of options for adult and community education as well as accredited vocational training courses.

**89:** Bennett, A & Edwards, H 2001, 'VET on the airwaves over South Australia: Key outcomes from Indigenous VET programs—a case study of the Indulkana Anangu radio program', in *VOCAL*, vol.4, pp.19–21.

This short paper describes a remote-area program in north-west South Australia for secondary school students at the Indulkana Anangu School. It is specifically for community radio and involves delivery of modules from an accredited VET program.

**95:** Gelade, S & Stehlik, T 2004, *Exploring locality: The impact of context on Indigenous vocational education and training aspirations and outcomes*, NCVET, Adelaide.

This study explores Indigenous aspirations, opportunities and outcomes in urban, rural and remote communities in South Australia (three sites, one in each region). It describes the barriers

to outcomes across the regions, and identifies differences between them, but does not explore in much detail the interventions that might lead to positive outcomes for Indigenous learners.

**101:** Byam, N 2002, *Evaluation of the First Nations and Inuit Youth Employment Strategy*, Department of Indian Affairs and Northern Development, Canada.

This international study looks at an Indigenous youth employment strategy in Canada aimed at improving transitions for young people from school to work through various pathways. Components of the program involve training, and the study supports findings of the core study 103 also in Canada.

**106:** Balatti, J, Gargano, L, Goldman, M, Wood, G & Woodlock, J 2004, *Improving Indigenous completion rates in mainstream TAFE: An action research approach*, NCVER, Adelaide.

This study uses action research principles to explore the facilitators and barriers to Indigenous participation and completions in mainstream TAFE courses. Part of the research approach is to actively change organisational practices through teachers as researchers. The research was carried out in four TAFE institutes in Queensland.

**107:** Kral, I & Falk, I 2004, *What is all that learning for? Indigenous adult English literacy practices, training, community capacity and health*, NCVER, Adelaide.

This study looks at the English and local language literacy practices in a community-controlled health service in a remote Indigenous community in the Northern Territory. It explores the role that training has in such a context, and is related to core study 41.

**113:** ANTA 2002, 'Identification of skills gaps in specific industries project', unpublished report prepared by J&S Learningwork and Judy Duffy Training Consultants for ANTA, Brisbane.

This unpublished study looks at the gap between the existing skills of Indigenous people and people with a disability compared with the requirements for certificate II qualifications in a range of industries. This is particularly useful in identifying the barriers to education and training for Indigenous people, and includes some good practice examples.

## The 31 studies not used in the synthesis

The main reasons these 31 studies have not been used are due to age, repetition of reviewed primary research in secondary sources, lack of methodological information or generally poorer quality. Many of these studies corroborate the findings of the studies above, but do not have the evidence in themselves to generate findings.

**1:** Govender, E 2000, *Working together—a cooperative approach to Aboriginal education*, Australian Indigenous Education Conference, Fremantle.

This paper is based on a description of programs in the Blacktown and Mt Druitt areas of western Sydney, NSW. The reviewers note that it lacks methodological detail and evidence to support the conclusions or validate the findings. The voices of students and participants also seem to be absent. The principles, however, are emphasised in the synthesis from the core and supporting studies above.

**9:** Bambrook, A 1994, 'Focus paper three: To what extent do developments of best practice approaches to VET delivery include attention to what is best practice for Indigenous individuals and communities? What is an appropriate set of criteria for best practice delivery to Indigenous individuals and communities?', unpublished paper, National Aboriginal and Torres Strait Islander Peoples' Training Priorities Seminar, Canberra.

This paper pre-dates many of the changes that have occurred in the VET system in more recent years, including the establishment of the Aboriginal and Torres Strait Islander Peoples' Advisory

Committee. It does not link to the outcomes Indigenous people aspire to, and is more an opinion-based descriptive critique of 'best practice' approaches. No evidence is presented on which the conclusions have been drawn.

**10:** Lester, J 1994, 'Focus paper four: How can Indigenous communities increase their control over VET delivery and assert greater 'user choice' of providers and provision? What resources are available to support greater community control over training delivery?', unpublished paper, National Aboriginal and Torres Strait Islander Peoples' Training Priorities Seminar, Canberra.

This paper was presented with study 9 above, and is not used for similar reasons. Data are not provided on which the validity of the conclusions can be measured or ascertained. These papers are focused at macro-level policy, rather than practical activities.

**14:** Department of Employment and Training (Queensland) 2001, *Equal access? Report on six action research projects into the access and equity of students with a disability and Aboriginal and Torres Strait Islander students in vocational education and training*, Department of Employment and Training, Brisbane.

Three of the six case studies in this project look at Indigenous training programs and provide some information on their development and implementation. The reviewers concluded that there was insufficient information provided on which to judge the quality of the research itself. As it was action research based, the fluid nature of the research was not adequately reflected in the report, in terms of appraising the reliability and validity of the findings.

**17:** Tierney, B 2002, *Murrin Bridge community development program* from the 2<sup>nd</sup> World Congress of Colleges and Polytechnics, Melbourne.

The reviewers of this paper note that there is very little evidence provided, and that reference to previous research is not detailed. The paper itself looks at a viticultural course developed in Murrin Bridge. The voices of students and other stakeholders, aside from the author, are not present.

**19:** Department of Employment and Training (Queensland) 2002, *Kaulder Jibbijah 2002: Our working partnership with Aboriginal and Torres Strait Islander peoples*, Department of Employment and Training, Brisbane.

As this report is more a description of Queensland Government policies and programs, rather than an evaluation or research project, it has not been included in the synthesis. It does provide an example of policy-based information and government activity related to Indigenous employment and training.

**22:** Schwab, R & Anderson, I 1999, *Trends in Indigenous participation in health sciences education: The vocational education and training sector, 1994–97*, discussion paper 179/1999, Centre for Aboriginal Economic Policy Research, Canberra.

This paper looks only at the actual participation of Indigenous people in health sciences training in the mid-1990s, and does not address any of the interventions impacting on the participation or how it can be improved. The quality of the research itself is good in terms of valid and transparent data analysis using reliable sources, although it is somewhat dated.

**24:** McKinney, S 1995, *On home ground: Community-based approaches to Koori adult education—a report on the Special Needs Grant Project, Wellington, NSW*, Western College of Adult Education, Dubbo, NSW.

This paper is linked directly to supporting study 67, which also detailed the program developed at Western College of Adult Education. The data it provides support the findings of the higher-rated studies.

**33:** Schwab, R 1998, *Educational 'failure' and educational 'success' in an Aboriginal community*, discussion paper 161/1998, Centre for Aboriginal Economic Policy Research, Canberra.

The reviewers of this paper note that its relevance to the question is low, given that it focuses on school-aged children and the provision of schooling opportunities in a remote area. The research itself is of good quality.

**37:** Madden, R 2000, *If it wasn't for CDEP: A case study of Worn Gundidj CDEP, Victoria*, discussion paper 210/2000, Centre for Aboriginal Economic Policy Research, Canberra.

This report was not used because it is based on a discussion of a CDEP, although there are links to training in terms of how CDEP and the VET system interface and can work more effectively.

**64:** Construction Training Queensland 1997, *Best practices in training access and effective participation: Building and construction industry training for Aboriginal and Torres Strait Islander communities*, Construction Training Queensland, Brisbane.

The reviewers of this study note that it is primarily descriptive, and does not provide sufficient evidence on the development, effectiveness or rigour of the evaluation or the programs.

**65:** Department of Education, Science and Training 2003b, *Report on the Review of the Independent Indigenous Vocational Education and Training Providers*, Commonwealth of Australia, Canberra.

This report was reviewed at the training workshop for this systematic review, as a joint exercise for all the reviewers. It does not provide sufficient information on which to link the outcomes achieved by Indigenous providers and the practices they employ. It does, however, support the findings of core study 48 that looks at the same group of VET providers.

**68:** Lowe, K & Tassone, J 2001, *Aboriginal Career Aspirations Program: School and community career education—a report and discussion on a NSW Board of Studies project*, Australian Association for Research in Education, Melbourne.

Although this paper supports the findings of higher-rated studies, it was found to be of low relevance to the question, as it dealt with a career aspirations program for young people, rather than education or training itself.

**71:** Pitman, C & Tregambe, J 1997, *Appropriateness of vocational education and training in Victorian prisons*, Kangan Batman Institute of TAFE, Victoria.

The reviewers of this study note that most of the conclusions were drawn from the literature review undertaken for the project, which relied on older materials that had since been outdated by changes in the VET system. They also note conclusions regarding Indigenous students in prisons must be treated with great caution since they are based on a very small sample of Indigenous prisoners.

**72:** Aboriginal and Torres Strait Islander Peoples' Training Advisory Council 1997, *New Apprenticeship and traineeship opportunities for Aboriginal and Torres Strait Islander peoples: Community development through skills development—an ATSIPTAC discussion paper*, ATSIPTAC, Victoria.

This report was not used because the methodology used to develop the discussion paper is not detailed, and the scope of the paper was very broad. The reviewers for this study note that there are no data or evidence provided, in terms of who in particular was consulted to develop the paper, or who responded to it.

**73:** Department of Employment, Education and Training 1995, *National Review of Education for Aboriginal and Torres Strait Islander Peoples: Final report* (includes the following separate documents: discussion paper (1994); summary; and statistical annex), AGPS, Canberra.

Due to its age and the fact that statistical data have been updated frequently since its publication, this study was not included in the synthesis. It focused quite specifically on compulsory education, and so its overall relevance to the question is somewhat limited. However, it does concur with the findings of the other studies, and should be used as an historical reference point.

**74:** Golding, B & Volkoff, V 1999, *Creating outcomes: Individuals and groups on the VET journey—report of a major longitudinal study of student experiences over the course of their vocational education and training in Australia*, vol.1 & 2, University of Melbourne and ANTA, Brisbane.

This report was not used as the Indigenous cohort was very small in the context of a larger group of survey respondents. The reviewers note that the study methodology is very thorough and of high-quality; however, the veracity of the conclusions for Indigenous students is limited.

**76:** Florisson, S 2000, *VET for Aboriginal students: How effective is it?*, Wongutha Christian Aboriginal Parent Directed School, viewed 25 August 2005, <<http://www.vecosash.org.au/filestore/wadu/wongutha.doc>>.

The reviewers of this study found that the methodologies and tools used to collect the data were limited: the time elapsed between people's participation in the program and the research itself was in some cases several years; the questionnaire used mostly 'closed' questions that did not allow for students to open up and talk about their experiences in what led to their outcomes from the program. This impacted on the conclusions that could be reasonably reached.

**82:** Kearns, P, Murphy, M & Villiers, G 1996, *Industry education partnerships: Innovation and learning—report five: Access and equity case studies*, Office of Training and Further Education, Melbourne.

The relevance of this report and its findings are limited by the fact that only one reported case study looked at an Indigenous training program. The findings of this case study do, however, support the higher-rated studies. The reviewers also note that the age of the data impacts on its current relevance (1994–95).

**84:** University of Sydney (The Koori Centre and Yooroang Garang, Centre for Indigenous Health Studies) 1996, *Examination of pedagogical issues in higher education and training underpinning the development of culturally appropriate module-based education programs*, University of Sydney.

This project included a review of University of Sydney programs and an annotated bibliography. The reviewers of the paper note that it was incomplete in terms of the information it provided, showing differences between the proposed methodology and what was actually completed by the researchers. Reference was made to a later report that could not be found. Although claimed to be in part about training, the focus is on university-level education. Its relevance and quality are limited.

**88:** Jansen, D, Jansen, P, Sheehan, D & Tapsell, R 2001, 'Teaching Maori health professionals in a culturally appropriate setting' in *Knowledge demands for the new economy*, proceedings of the 9<sup>th</sup> annual International Conference on Post-compulsory Education and Training, vol.1, Centre for Learning and Work Research, Griffith University, Brisbane.

This paper from New Zealand was not used because no clear methodology was stated and it was a relatively short article with limited data. The findings do support those of the higher rated studies, in the context of Maori education.

**91:** Johnson, P & Herring, S 2001, 'Education and opportunities—there are many other ways', paper presented at the 8<sup>th</sup> International Literacy and Education Research Network Conference, Common Ground Publishing, Victoria.

This report was not used because it does not address outcomes from VET, and does not provide substantive evidence for the conclusions. This is likely because it is a paper from a conference, and not a full report of research itself.

**93:** Junankar, P & Liu, J 2003, 'Estimating the social rate of return to education for Indigenous Australians', *Education Economics*, vol.1, no.2, pp.169–92.

This report looks very specifically at the impact of participation in education on the social and financial return on investment to Indigenous people. It does not deal with interventions or outcomes in any way that can be applied to the review question or findings. As such, its relevance is very low.

**96:** Malin, M & Maidment, D 2003, 'Education, Indigenous survival and well-being: Emerging ideas and programs', *Australian Journal of Indigenous Education*, vol.32, pp.85–100.

This paper explores more of the history of Indigenous education, and the disadvantages and barriers Indigenous people experience through education. As this is a short journal article, the original research would be more likely to provide more data and evidence for the conclusions. The conclusions in this piece are drawn largely from an assessment of literature. Brief reference is made to two school-level programs in Central Australia.

**98:** Richardson, C & Cohen-Blanchet, N 2000, *Adult education and Indigenous Peoples in Canada*, UNESCO Institute for Education, University of Victoria, Canada.

The reviewers of this study note that the case study data, and its apparent reliance on one informant for each site, limits the extent to which confidence can be placed in the findings of the study. They also note that there is no tabulation of the data cited in text. As this study is from Canada and draws on outdated literature, its relevance is low.

**99:** Lund, S 2000, *Adult education and Indigenous peoples in Norway*, UNESCO Institute for Education, Nordic Sami Institute, Norway.

This report was rated highly for the quality of the research, but its relevance to the question is limited. It looks at the Indigenous Sami population in northern Europe, in which the social and political environment is very different from that of Australia. Thus, conclusions drawn in this study cannot reliably be applied to education for Indigenous Australians.

**100:** Hull, J 1996, *Aboriginal post-secondary education and labour market outcomes: Canada, 1996*, Indian and Northern Affairs, Ottawa, Canada.

This report was also rated high for the quality of the research and methodology, but its age and lack of reference to interventions limits its relevance in the Australian context. It is a statistical analysis of the training and employment outcomes that Indigenous Canadians report through the 1996 Census of Canada.

**105:** Boughton, B, Durnan, D, Bowman, K, Loveder, P, Saunders, J & Jones, M 2004, *Partners in a learning culture: Blueprint for implementation—Mid-term review phase one report*, ANTA, Brisbane.

This is the phase one report from the mid-term review of *Partners in a learning culture*. It reports on a survey of partner organisations to the strategy and blueprint in terms of their progress against the stated objectives and actions. The quality of the research itself is rated high, but its relevance to the question is limited. It pertains to the broader achievement of stated goals rather than specific learning interventions and outcomes.

**109:** Aboriginal and Torres Strait Islander Commission 1999, *Analysis of the proposed changes to ABSTUDY on Indigenous students*, viewed 25 August 2005, <[http://www.atsic.gov.au/issues/Education/ABSTUDY\\_Changes\\_1999/default.asp](http://www.atsic.gov.au/issues/Education/ABSTUDY_Changes_1999/default.asp)>.

This report is not used because the data analysis is not relevant to the interventions or outcomes in training for Indigenous people. Its focus is on the impact that changes to the ABSTUDY allowance could have on Indigenous people in VET and higher education, particularly in terms of the amount they would receive. The wider impact of the changes on Indigenous participation and outcomes in training is not explored.

**111:** Arthur, W & David-Petero, J 2000, *Education, training and careers: Young Torres Strait Islanders, 1999*, discussion paper 207/2000, Centre for Aboriginal Economic Policy Research, Canberra.

This study does not refer to specific program interventions or outcomes for young Torres Strait Islanders, but rather asks them about the value they place in education generally. The research itself is potentially limited in its representation of Torres Strait Islanders, and little information is provided on the actual methodology of the project.

**112:** Schwab, R 2001, *If you have a dream, you make it happen': Approaches to maximising educational engagement among young Indigenous students*, prepared for Department of Education, Science and Training, Commonwealth of Australia, Canberra.

This study is based on three case studies, one of which is VET-focused, and another which deals in part with VET. The relevance to the question is limited by the lack of detailed information on program design and the outcomes achieved. The numbers of people consulted during the research, and their positions, are not known from this report.

# Support document details

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Additional information relating to this research is available in *Aspects of training that meet Indigenous Australians' aspirations: A systematic review of research—Support document*. It can be accessed from NCVER's website <<http://www.ncver.edu.au>>. This document contains:

- ✧ resources used for search
- ✧ key search terms
- ✧ evaluation template.



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This program is based upon priorities approved by ministers with responsibility for vocational education and training (VET). This research aims to improve policy and practice in the VET sector:

A systematic review of research is a decision-making tool for policy and practice. It aims to identify, critically appraise and synthesise relevant research on a specific topic in order to find the answer to a given question.

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