

# **Pathways to effective training outcomes: lessons from northern Australia**

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## **Abstract**

In recent years there has been a lot of emphasis on the importance of training outcomes for individuals and industry. These outcomes have been well described in terms of employment, educational, community development and personal development outcomes. There has similarly been a lot of emphasis on training delivery that takes place to produce those outcomes. There has been far less research on the formative processes that take place for participants prior to—and following on from—training delivery.

This paper considers these processes in terms of a model that includes needs identification, motivators and enablers as well as the identities that are developed as a result of participation in training. The findings show that while there are clear pathways for training along streams that lead to industry, community and personal development outcomes, there is no clear pathway for training that leads to new enterprise development. The results also suggest that it is quite possible for training participants to switch tracks from a pathway that leads to community or personal development outcomes to one that leads to industry outcomes—and vice versa.

The paper draws on research conducted by the author towards a PhD. The findings come as a result of over 100 semi-structured interviews with education and training stakeholders (representatives from industry, communities, government agencies and providers) in four separate case-study sites in northern Australia. The model presented has implications for providers, government funding bodies and industry advisory bodies. It offers a possible way of eliminating ‘training for training’s sake’ and of promoting effective outcomes for organisations involved in planning and developing new education and learning initiatives. It raises questions about the need for a more clearly defined pathway for training that leads to enterprise development and suggests alternative measures for determining the success of education and training programs.

## **Introduction**

In recent years there has been a lot of emphasis on the importance of training outcomes for individuals and industry. These outcomes have been well described in terms of employment, educational, community development and personal development outcomes. There has similarly been a lot of emphasis on training delivery that takes place to produce those outcomes. There has been far less research on the formative processes that take place for participants prior to—and following on from—training delivery. This paper considers these processes in terms of a model that includes needs identification, motivators and enablers as well as the identities that are developed as a result of participation in training.

## Literature

While there is a significant body of research that shows quite clearly that VET produces a number of outcomes for participants, industries and communities (e.g. Blom & Clayton 2004, Kearns 2004, Kral & Falk 2004), there is not as much known about the *ways* that VET produces these outcomes. ‘Success’ in education and training is often considered simplistically and with assumed meanings. For example, the unstated assumption in the phrase ‘successful course completion’ could be one of a number of possibilities: graduation, passing, moving on to the next phase, competent, regular attendance or getting to the end (regardless of passing or failing). Successful outcomes for individuals are often referred to in terms of relevance to employment, satisfaction, achievements against the desired purpose (NCVER 2004), completion of a training contract (Robinson 2001:102). ‘Competence’ rather than graded performance is used in VET for assessment, leading to subjective judgements about what constitutes excellence in VET (SEWRSEBC 2000; Smith 2000).

At a broad community level, the connection between learning and well-being is frequently made in literature in a variety of contexts: at a national/international level (e.g. OECD 2001) for Indigenous peoples (ATSIC 1999); in relation to environment and sustainability (e.g. EA 2002), and in relation to communities (CRLRA 2001b; Falk, Gold & Balatti 2000) and the development of social capital (Birch *et al* 2003). The importance of being literate and numerate as a basis for successful participation in society is often noted (e.g. Cumming 1997; Kilpatrick & Millar 2004; OECD 2000). The benefits of learning for regional communities in Australia are reported widely in literature in terms of social capital or capacity building (e.g. Falk, Golding & Balatti 2000; Golding, Davies & Volkoff 2001), terms that are ‘bandied around’ (HRSCATSIA 2004:11). In its discussion of community capacity as it relates to social capital the ABS (2004) adopts Black and Hughes’ (2001) definition of community capacity, which is in turn drawn from the Aspen Institute’s (1996) work on measuring community capacity:

Community capacity is the combined influence of a community’s commitment, resources and skills that can be deployed to build on community strengths and address community problems and opportunities. (p. 1)

At an industry level, one of the key measures of success in training and education is to meet the skills needs of industry with a supply of appropriately qualified labour. In an industrial environment where employment is at record highs and nationally, unemployment is at 30 year lows—5.1 per cent in December 2004 (ABS 2005)—an increasing number of industries are drawing attention to skills shortages and strategies to meet these. While there is some discussion about whether training leads to increased productivity or is the result of an already profitable business (Moy 2001; Smith 2001), there is little doubt about the underlying reasons for businesses’ desire to upskill their labour force. It is apparent that enterprises look for observable productivity improvements: they look “for *proximal* rather than *distal* effects” (Figgis 2001:104)—things that have a direct and immediate impact on the enterprise environment.

While it is apparent from the literature reviewed that successful outcomes for industry are related to meeting skills needs, ensuring productivity and competitiveness, there is little in this literature that suggests what the determinants of success are. Dawe

(2003:9) however, notes three key determinants: an organisational culture that supports learning; mechanisms to link training to the business strategy; and mechanisms to link training to workplace change. For communities, partnerships are often instrumental in determining the success of VET outcomes, particularly in rural communities Kilpatrick and Guenther (2003) found that the outcomes of partnerships were to some extent dependent on the type of partnership formed and the value of partnerships was seen more in terms of indirect benefits that arose out of collaboration than in direct benefits such as increased productivity, skill development or meeting specific enterprise needs. Research by the Country Education Project Inc. & Youth Resource Centre (2001:32) similarly identified community support in terms of 'mutually beneficial partnerships', as an important factor that drove success of rural VET in schools programs.

With few exceptions the literature reviewed invariably describes success in terms of outcomes or outputs. For example, success for individuals is achieved on completion of a qualification, on a job outcome or achievement of new skills. For industry, successful training is defined in terms of meeting skills needs for a productivity or risk management outcome. Similarly for other stakeholders in education and training, the issue of success is discussed in terms of what comes out of the training. There was very little literature that described success in terms of inputs or processes.

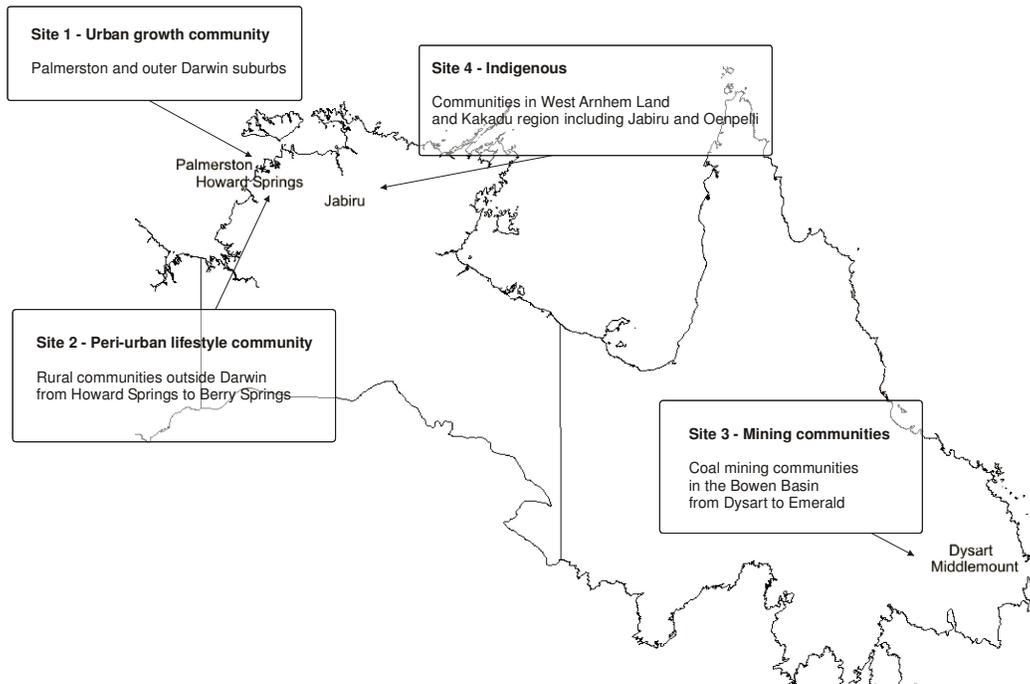
## **Methodology**

The research methodology for this project is based on a grounded theory approach (Charmaz 2000) with a mixed method design (Creswell 2003; Tashakkori & Teddlie 1998). The project involved two stages: the first largely quantitative; the second largely qualitative. Both however had deductive and inductive analysis strategies built in.

The first stage of the project involved a quantitative examination of indicators of well-being that could be measured and applied to community contexts across regional communities, particularly in the Australian tropical savanna region. This led to the identification of 'types' of communities, each with differentiable characteristics, strengths and vulnerabilities: urban growth communities; peri-urban lifestyle communities and mining communities; Indigenous communities and rural communities.

Consistent with the qualitative nature of the second stage of the research, case studies were used to elicit responses from education and training stakeholders from sites defined by four of the five community types identified in the first stage. Figure 1 maps the case study sites used for this research. The research design allowed for a multi layered (Patton 2002: 447), multi-site approach that enabled exploration of more generalisable principles and adequate external validity (Merriam 1998:40; Stake 2000:437) so that findings could be applied to other Australian regional contexts. A semi-structured interview approach was selected as the most appropriate means for the theory building aims of the second phase (Fontana and Frey 2000; Wengraf 2001)

**Figure 1. Case study sites used in this project**



Essentially the findings presented in this paper are drawn from one question out of four in a semi-structured interview with respondents:

Can you give an example of a learning program/course that you have observed or been involved with in this community that has been effective? What made it effective?

A total of 102 interviews were conducted, with stakeholders coming from community representatives, government agencies, industry groups and providers.

### **Findings and discussion**

The aim of the case studies was to identify ways that VET contributes to capacity building across the region. To this end stakeholders were asked to identify beneficiaries, drivers and barriers to education and learning as well as examples of effective training programs. The purpose of this paper will be to flag the preliminary findings from case studies for one key question: What inputs and processes are required to produce effective VET outcomes?

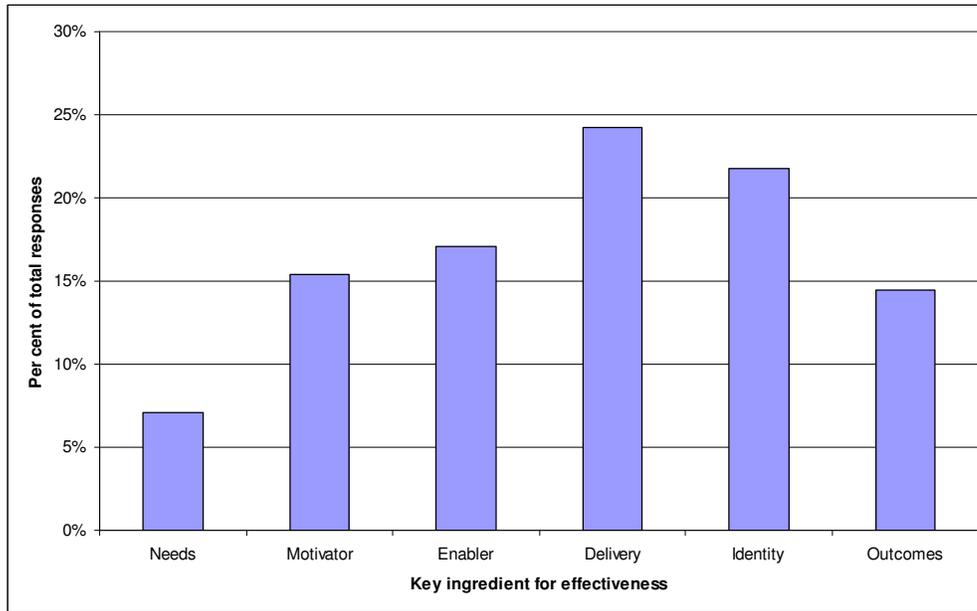
It should be noted that the findings presented here are not exhaustive and should be treated as indicative only, pending the results of detailed analysis yet to be conducted.

### **Inputs and processes required to produce effective VET outcomes**

One of the key objectives of the case study interviews was to identify the processes by which effective outcomes were achieved. Effectiveness in this paper is used to describe training programs that were felt by respondents to be either successful or positive according to their own perceptions. Derived from this research, Figure 2 below, summarises the findings from the case study interviews in terms of the

identified components of effective training as they were described in responses to the question (see above) asked in the semi-structured interview. This section will be used to illustrate what respondents meant by these key ingredients.

**Figure 2. How respondents perceived key ingredients of effective training programs (n=1015, multiple responses allowed)**



### *Precursors to training delivery*

The role of stakeholders in producing effective capacity building outcomes will not be discussed further at this point. The focus of the ensuing discussion will be on the processes that occur along the way to producing capacity building outcomes. It is suggested here that there are three important precursors to effective outcomes even before training is delivered: *needs identification*, *motivators* and *enablers*. These will now be discussed in the light of the research data.

### Needs identified

The data suggests that the first step along the way to effective training outcomes is the identification of a training need. The need could be recognised by the individual, an enterprise, an industry group, a provider, a family or a community. The identification of a need establishes the *reason* for training.

A key ingredient to many Indigenous community training programs cited by respondents was seen to be community ownership. In other words, the community saw the need and the training providers facilitated that need and helped promote the appropriate networks required to make it happen. In the example cited below, the training program culminated in a major sporting event, which engaged youth in a year long process.

So they looked at giving people really practical experience which culminated in the [special event]... This group of young people were basically mentored through the process of the year which was perhaps a lot longer than other

training providers would've done to take to do the same sort of thing... It was really intensive, it was really community owned, they linked it to the school and its footy clinics. ...really hands on practical teaching involvement.

As a foundation for effective VET, community ownership is an indicator of the likelihood that the community has identified a *need* and has correctly matched a training program to meet that need.

Needs can also be foundational for effectiveness at a personal level. One example of needs identification can be seen in the following example, which shows trainees identifying their employment aspirations:

I: I'd like you to tell me then is what the training course means for you?

R1: I'm doing this hospitality the course and it's open up a lot of doors to me to get into job opportunities...

R2: I come to do this course because I want to work out in the mines...

R3: [I'm] doing a hospitality training course, I would like to get a job in a restaurant, into a restaurant and work as a qualified chef.

R4: ...a job... we're all here to get a job.

Other respondents gave examples of individuals who recognised their need for self-improvement and entered into training for that reason. Identification of need therefore determines the initial reason for training and to some extent determines the track which the individual sets out on.

### Motivators

If the identification of need provides the reason for training, motivators provide the *impetus* for training. The impetus for training can come from a number of sources. It can come from the individual, from a family member, from a community or industry leader or it may come from a financial incentive or reward that creates the impetus.

A number of respondents identified individual motivational factors as foundational for the effectiveness of a program. Among these motivational factors was self-motivation—the desire of the individual to engage in training. An employer in the hospitality industry spoke of the self-motivation of her trainees in terms of them 'wanting to do something with their lives'.

But bear in mind... they're all kids that want to do something with their lives and are sick of sitting in Darwin and doing nothing.

Several programs were identified where an individual's leadership or an organisation's mission drove effective training outcomes. In most instances the drive for success involved long-term commitment.

Another major motivator identified by respondents could be described as financial. These incentives generally applied to individuals in the form of increased income and to enterprises in the form of subsidies and increased profitability through improved productivity. While government were not seen to be leaders in terms of generating impetus through leadership, they were seen as motivators in the sense that they provided funding, which was considered to be a significant incentive, particularly for providers.

## Enablers

Enablers act to facilitate or smooth the way for training delivery. Enablers here can be considered in terms of resources. These resources can be thought of in terms of economic, social, political, physical and human enablers. While needs identified establish the reason for training and motivators provide the impetus for training, enablers provide the *resources* for training.

One of the key foundations for effective outcomes was found to be funding—and not just funding but *long term* funding. This commitment to the longer term has been identified as a key factor for effective delivery at other levels, most notably in the recent Northern Territory secondary education review (CDU/NTDEET 2004). One industry representative commented that it was not only funding, but long term commitment to a project together with adequate support structures that was significant.

I: So why did it work? Was it the partnership?

R: Partnership, long-term commitment and funding. And even though it didn't necessarily always fit into funding models and found it pretty hard to get ongoing support. In the end they did. Perhaps not as much as they would've liked. But there was that infrastructure there. The partnership and the infrastructure and the money to be out there and the committed people behind the whole process.

Another key to effectiveness of many VET programs cited in the research was considered to be basic school education. Respondents referred to the importance of basic, functional literacy and numeracy skills and education, which prepared people for the world of work.

Often, as suggested by **Error! Reference source not found.**, the connections between the various tracks—which may be facilitated by formal or informal partnerships between stakeholders through collaborative processes—are vital to the outcomes of training programs. It is recognised that these collaborative arrangements can happen at any point along the way, even at the point of needs identification, but the net result is that they have an enabling influence through resource sharing and information sharing. The data showed several examples where collaborative approaches were key to effective outcomes. The following example from a respondent involved in government identified the significance of collaborative approaches for meeting educational, personal and employment needs in individuals and the needs of the community as a whole:

I would say it has to be a collaborative approach that we are all working together to try and prove to the community, particularly to our young ones, that education is a key not just to get a good job and earning lots of money and even though that appeals to them; its the key to self esteem.

The findings presented in this section are not necessarily absolute and it may be true that there is some blurring of the foundations for effectiveness that make it difficult to clearly delineate between the three foundational 'building blocks' identified. However, the respondents in this research in answer to questions about what makes programs effective, have clearly articulated that *effective* training will be based on an

identified need, will be given impetus by motivators and further, will be facilitated through enabling resources.

### *Training delivery*

With the need identified, and effective motivator in place and enablers available to resource training, the next critical point along the track to effective outcomes is clearly the training delivery. The interviews revealed several key factors that were important as part of quality training delivery. In the first instance these include a set of *content and delivery* considerations:

- Training that meets the needs of individuals;
- Training that is relevant to the desired outcomes;
- ‘On the job’ components (often described as ‘hands on’ or ‘practical’);
- Consideration of the cultural, language and social context of the trainees; and
- Standards of assessment consistent with competencies required.

Alongside these issues related to the content and delivery, are a number of *characteristics* of programs that are also associated with effective outcomes. Training programs were seen to be effective if:

- They related directly to tasks being done at work or in the community;
- There was adequate support for individual trainees;
- They were flexible and adaptable to meet needs of trainees;
- They were engaging and provided opportunity for interaction; or
- They were enjoyable or fun.

Further, respondents identified a number of *process* issues that were associated with training delivery that again contributed to the effectiveness of outcomes. These process issues did not relate directly to the content or the method of delivery but were important adjuncts to the delivery. They were identified in terms of:

- Positive and long term trusting relationships between providers and stakeholder (community, individual or industry);
- Mentoring of individuals (providing effective role models);
- Effective coordination (often described as liaison between providers and communities);
- Planning and evaluation (to ensure that needs of stakeholders continue to be addressed);
- Worthwhile recognition of the qualification obtained in training; and
- Structures that facilitate ongoing learning in a fair and equitable way (these included partnerships and networks that can be tapped into).

The above lists are not necessarily exhaustive and require a degree of ‘unpacking’ within their relevant contexts. However, they do provide an indication of the range of training delivery factors that may contribute to effective outcomes. The training delivery is crucial for effective outcomes because first it brings together the relevant stakeholders in a kind of convergence of multiple interests: providers, government, participants, industry and community at a significant phase in the training process. It is important because of the significant amount of effort and resources that are provided to make it happen.

While the statistical significance is yet to be tested, the initial analysis suggests that if some of the precursors to training are not addressed then it is less likely that there will be a positive outcome. Examples of ‘training for training’s sake’ cited in the data illustrate the lack of attention given to the precursors to training delivery.

It is also important because of the way in which to a large extent the outcomes are determined at the point of training in terms of community, personal, new enterprise or employment. The point of training delivery is then the last point along the process where an individual can switch from one track to another. The training also has some influence over the formation of identity, which is the next and final step.

### *Identity formation*

If ‘identity’ is about defining who and what I am and if ‘identity formation’ is about defining who and what I want to be, then this last step is an important final step to producing effective capacity building outcomes. Identity formation also draws on the current and historical understanding of self. Training feeds into identity formation by providing new skills, new knowledge and new relationships as well as a new sense of personal self-worth. In terms of the data, identity formation is expressed in a number of ways:

- A recognition that training builds self-confidence and self-esteem (*Who am I?*);
- Application of training to achieve things that were previously not thought to be possible (*What am I capable of?*);
- Re-engagement in the social fabric of the community (*How do I fit in?*); and
- A fresh awareness of how participants and others view the world (*How do I see the world and how do others see mine?*).

Formation of the identity also depends on what follows on from training. If for example training comes to an end and there is no application for the skills and knowledge learned then the outcomes cannot be expected to be effective. If on the other hand the training facilitates engagement with meaningful activity—paid or unpaid—the results of the training could be expected to be effective.

### *Implications*

The results shown here should be taken to be formative and indicative. They are presented with only a limited analysis, with more in-depth analysis yet to be carried out. With this taken into account, three implications are tentatively offered for consideration.

#### Implication 1: Eliminate training for training’s sake

The focus of this research has been on what makes training effective. Many respondents contrasted their examples of effective programs with those that were ineffective—those that were ‘set up to fail’. If the precursors to effective training, described above and shown in Figure 2 are valid and they are indeed necessary prerequisites of effective training, it would be reasonable to assume that by ensuring that there is a need identified, that there is adequate motivation and that there are adequate resources before training is delivered, then ineffective training—training for

training's sake—could be avoided. The implication of this is simple. There would be more funds available to be applied to where training is needed most.

### Implication 2: Planning new education and learning initiatives

Conversely to Implication 1, for those stakeholders planning to develop new training programs, the three precursors to training provide a framework that can be applied at any level of training, to ensure that it is delivered to produce effective outcomes. The criteria for the precursors can be applied equally to training for community outcomes, training for personal outcomes, training for industry outcomes or training for enterprise outcomes.

### Implication 3: Alternative indicators of successful training

Success of training programs is often measured in terms of completions, certificates attained, attendance, retention rates and other quantifiable measures. The data reviewed here suggests that there are equally valid and measurable qualitative indicators of success, which could be applied to a variety of training programs. These indicators could also be tailored to suit the desired end result in terms of community, industry, personal or enterprise outcomes. It is therefore suggested that a combination of measures of success be used to determine the worth of training programs and that evaluation of programs be made on the basis of a mix of measures appropriate to the application of the training. These measures would include factors such as:

- Personal development outcomes (e.g. indications of improved self-esteem, leadership skills, problem solving and decision making skills)
- Community development outcomes (e.g. contribution to health, education, social engagement, civic participation, engagement with networks)
- Stakeholder relationship skills for industry (e.g. indicators of cultural awareness, bridge building, improved interpersonal skills)

## **Conclusion**

This paper has focused on one key question: What inputs and processes are required to produce effective VET outcomes?

The findings point to a number of inputs and processes required to make training outcomes effective. *First*, a need has to be identified by stakeholders, including participants, to establish the reason for training. *Second*, there must be an adequate motivator or incentive to establish the impetus for training. *Third*, there must be enablers, which provide the human, physical and financial resources to ensure the training can be effectively delivered. Respondents indicated that effective delivery means more than 'good content'. It needs to be characterised by a variety of things including flexibility, enjoyment, engagement and adequate support. It also needs to be accompanied by a number of processes, including development of positive relationships, effective coordination, proper planning and evaluation processes and worthwhile recognition for participants. *Finally*, effective training delivery will lead to positive identity formation. Training that does lead to a meaningful application—paid or unpaid—is often accompanied by an improved sense of self worth and the ability to contribute to the intended purpose above and beyond what was previously thought to be impossible. The findings presented in this paper therefore suggest that in

order to build capacity—individual, organisational or community—all these factors need to be present.

## References

- ABS (2004). *Measuring Social Capital. An Australian Framework and Indicators 2004*, Information paper, Cat. 1378.0, Australian Bureau of Statistics, Canberra.
- ABS (2005). *Labour Force Australia*, Cat. 6202.0, Australian Bureau of Statistics, Canberra.
- Aspen Institute (1996). *Measuring community capacity building*, Version 3/96, The Aspen Institute Rural Economic Policy Program. <http://www.aspeninstitute.org/index.asp> [Accessed March 2005]
- ATSIC (1999). *Submission to the Human Rights and Equal Opportunity Commission Inquiry into Rural and Remote Education in Australia from the Aboriginal and Torres Strait Islander Commission*, November 1999, Available from: [http://www.atsic.gov.au/issues/Disadvantage/education/HREOC\\_remote\\_education/default.asp](http://www.atsic.gov.au/issues/Disadvantage/education/HREOC_remote_education/default.asp)
- Balatti, J. & Falk, I. (2000). *Community Capacity and Vocational Education and Training*. Presentation for DETIR Skills Week Seminar, The Role of Training and Employment in Building Sustainable Communities: A place management approach, 8 September 2000, Logan City, Queensland.
- Birch, E-R. Kenyon, P. Koshy, P. & Wills-Johnson, N. (2003). *Exploring the social and economic impacts of adult and community education*, National Centre for Vocational Education Research, Leabrook.
- Black, A. & Hughes, P. (2001). *The identification and analysis of indicators of community strength and outcomes*, (Commonwealth Department of) Family and Community Services, Canberra.
- Blom, K. & Clayton B. (2004). *What works where you are?: A snapshot of training in five rural communities*. Australian Vocational Education and Training Research Association Conference: 7th, Canberra, 2004.
- CDU/NTDEET (2004). *Report on future directions for secondary education in the Northern Territory*. Charles Darwin University, Northern Territory Department of Employment, Education and Training, Darwin.
- Charmaz, K. (2000). Grounded Theory: Objectivist and constructivist methods. In (Eds.) N Denzin & Y Lincoln, *Handbook of Qualitative Research*, 2<sup>nd</sup> edition (pp. 509-535) Sage Publications, Thousand Oaks.
- Country Education Project Inc. & Youth Resource Centre (2001). *Vocational education and training in small rural communities*, National Centre for Vocational Education Research, Leabrook.
- Creswell, J. (2003). *Research Design: Qualitative, Quantitative and Mixed Methods Approaches*. Second Edition. Sage Publications, Thousand Oaks.
- CRLRA (2001). *Learning communities in education and training*. Vol 1 and 2. Report on the Role of VET in Regional Australia project for ANTA. October. Centre for Research and Learning in Regional Australia, University of Tasmania, Launceston.
- Cumming, J. (1997). *The quantitative literacy performance of Australians: Implications of low level skills*, Aspects of Literacy—Assessed Skill Levels Australia 1996, Cat. 4228.0, Australian Bureau of Statistics, Canberra.

- Dawe, S. (2003), *The changing training practices in large Australian firms*, Paper presented to the 2003 AVETRA conference, Sydney 9-11 April 2003.
- EA (2002). *Are We Sustaining Australia? Report Against Headline Sustainability Indicators*, Environment Australia, Canberra
- Falk, I. Golding, B. & Balatti, J. (2000). *Building Communities: ACE, Lifelong Learning and Social Capital*. Melbourne: Adult, Community and Further Education Board, Victorian Government.
- Figgis, J. (2001). 'What convinces enterprises to value training and learning, and what does not?' in *Return on investment in training. Research readings*, Ed. A. Smith, National Centre for Vocational Education and Research, Leabrook.
- Fontana, A. & Frey, JH. (2000). 'The interview: from structured questions to negotiated text', chapter in *Handbook of Qualitative Research*, Second Edition, eds Norman Denzin and Yvonna Lincoln, Sage Publications, Thousand Oaks.
- Golding, B. Davies, M. & Volkoff, W. (2001). *Review of research: a consolidation of ACE research 1990-2000*, National Centre for Vocational Education Research, Leabrook.
- HRSCATSIA (2004). *Many Ways Forward*, Report of the inquiry into capacity building and service delivery in Indigenous communities, House of Representatives Standing Committee on Aboriginal and Torres Strait Islander Affairs, Canberra.
- Kearns, P. (2004). *VET and social capital: a paper on the contribution of the VET sector to social capital in communities*, National Centre for Vocational Education Research, Adelaide.
- Kilpatrick, S. & Guenther, J. (2003), 'Successful VET partnerships in Australia'. *International Journal of Training Research*, Vol 1.
- Kilpatrick, S. & Millar, P. (2004). *People with poor language, literacy and numeracy skills. A hidden equity group?* In *Equity in vocational education and training: Research readings*, edited by Kaye Bowman. National Centre for Vocational Education Research, Adelaide.
- Kral, I. & Falk, I. (2004). *What is all that learning for? Indigenous adult English literacy practices, training, community capacity and health*, National Centre for Vocational Education Research, Adelaide.
- Merriam, S. (1998). *Qualitative research and case study applications in education*, Revised and expanded, Jossey-Bass, San Francisco.
- Millar, P. (2003). *Re-engaging with learning as a result of family and community capacity building projects: a case study from a socioeconomically disadvantaged community*. International Conference on Post-compulsory Education and Training: 11th, Gold Coast, Australia, 2003 in *Enriching learning cultures: proceedings of the 11th annual international conference on post-compulsory education and training: volume 2*. Griffith University. Faculty of Education. Centre for Learning Research (CLR) p. 165-172.
- Moy, J 2001, 'Showing that enterprise training pays: lessons from the literature' in *Return on investment in training. Research readings*, Ed. A. Smith, National Centre for Vocational Education and Research, Leabrook.
- NCVER (2004) *Australian vocational education and training statistics: Student outcomes 2004*, National Centre for Vocational Education Research, Leabrook.

- OECD (2000). *Literacy in the information age*, Final report of the International Adult Literacy Survey, Organisation for Economic Cooperation and Development, Paris.
- OECD (2001). *The Well-being of Nations—The role of human and social capital*, Organisation for Economic Cooperation and Development, Paris.
- Patton, MQ. (2002). *Qualitative research and evaluation methods*, Third edition, Sage Publications, Thousand Oaks.
- Robinson, C. (2001). *Australian Apprenticeships—Fact, fiction and future*. National Centre for Vocational Education Research, Leabrook.
- SEWRSEBC (2000). *Aspiring to Excellence: Report of the Inquiry into the Quality of Vocational Education and Training in Australia*, Senate Employment, Workplace Relations, Small Business and Education Committee, Parliament of Australia, Canberra.
- Smith, A. (2001). 'Return on investment in training: an introduction', in *Return on investment in training. Research readings*, Ed. A. Smith, National Centre for Vocational Education and Research, Leabrook.
- Smith, L. (2000). *Issues affecting the quality of vocational education and training in Queensland*, Department of Employment, Training and Industrial Relations, Brisbane.
- Stake, R. (2000). 'Case studies', chapter in *Handbook of Qualitative Research*, Second Edition, eds Norman Denzin & Yvonne Lincoln, Sage Publications, Thousand Oaks.
- Tashakkori, A & Teddlie, C (1998). *Mixed Methodology: Combining qualitative and quantitative approaches*. Applied Social Research Method Series Volume 46, Sage Publications, Thousand Oaks.
- Wengraf, T. (2001). *Qualitative Research Interviewing: Biographic narrative and semi-structured methods*, Sage Publications, Thousand Oaks.