ACE’S ROLE IN DEVELOPING AUSTRALIA’S HUMAN CAPITAL

A structured analysis

SAROJNI CHOY
SANDRA HAUUKKA
ELIZABETH KEYES

OCTOBER 2006

ADULT LEARNING AUSTRALIA
The authors. Dr Sarojni Choy (ALA Visiting Research Fellow) and Dr Sandra Haukka are on the staff of the Faculty of Education, Queensland University of Technology. Liz Keyes is a consultant affiliated with Learning Network Queensland.

© Commonwealth of Australia, 2006

This report has been funded by the Commonwealth through the Department of Education, Science and Training (DEST). The opinions expressed in this report do not necessarily reflect the views of DEST.
CONTENTS

EXECUTIVE SUMMARY  4
Improving skilling through ACE  5
Recommendations  7
ACE AND AUSTRALIA’S HUMAN CAPITAL  8
Background  8
Rationale for the project  10
THE NATIONAL REFORM AGENDA  11
Australia’s skills shortage  12
The role and functions of ACE  14
Profiling ACE  17
ACE PERFORMANCE  21
ACE students, subject enrolments and annual hours by program  22
    Student enrolments  22
    Subject enrolments  23
    Annual hours  24
ACE students by sex, age group and program type  25
    ACE students by age group and program type  26
    ACE students by geographic region and program type  28
ACE students by highest education level completed and program  30
ACE annual hours by delivery type and program type  32
    Annual hours by field of study  32
    Annual hours by qualification level and program type  33
    Subject enrolments by subject outcome and program type  34
ACE AND VET  35
IMPROVING SKILLING THROUGH ACE  36
    Training for Employment Outcomes  38
    Training for Improved Pathways  40
SUMMARY  41
RECOMMENDATIONS  44
REFERENCES  45
Appendix A: Skills shortages by industry  48
Appendix B: An overview of ACE in each State and Territory  51
Appendix C: ACE provisions for training for employment outcomes and training for improved pathways  55
EXECUTIVE SUMMARY

This project explored ways in which Adult and Community Education (ACE) could make a greater contribution to the human capital development outcome under the National Reform Agenda (NRA), and increase the number of skilled workers in Australia. Data on current vocational and non-vocational ACE programs was analysed. Strategies to improve ACE were collated for consideration by government authorities and ACE providers.

There is much diversity in the perceived role and activities of ACE. Researchers have found it challenging to create a profile that depicts the whole sector, particularly in the absence of much reliable, valid and comparable data on ACE activities and outcomes. However, there is evidence indicative of ACE’s assistance in re-engaging with learning and training, and initiating pathways to further training or employment. The potential for ACE to make a bigger contribution to skilling Australia is recognised by governments across the nation (Senate Employment, Workplace Relations, Small Business and Education Committee, 1997). Yet policy changes to facilitate an increased role of ACE in the skilling process, and resourcing for ACE programs continue to receive less attention.

This project explored three research questions:

- What does the current profile of the ACE sector look like?
- How is ACE contributing to reducing the skills deficit?
- How can ACE enhance its contributions to reduce the skills deficit and achieve the human capital development outcome of the National Reform Agenda?

The responsiveness of ACE has made valuable contributions to the quality of social and economic life particularly in local communities. ACE programs provide individuals with personal enrichment, general and vocational education, thereby continuing to add to the social capital of Australian communities. The balance between these roles by ACE usually depends on local needs and more recently, available government funding. A concerted response to changing community needs and government priorities also focused on the lifelong learning/learning communities debate as one model for sustaining communities. Current major Australian government priorities for the nation’s future include the ageing population, changes to the labour market, skills deficits and shortages, working with a culturally diverse labour force, and the increasing use of ICT in the workplace and communities.

Without the availability of current and complete national data on ACE activities and outcomes, it is impossible to measure ACE’s success in helping to address national issues and priorities at the local community level. Certainly, some of the benefits of ACE programs are difficult to measure in quantitative terms as they are not fully captured in existing datasets.

Over the last five years, about 12.8% of VET was delivered in the form of vocational ACE programs. Just over half the ACE students engaged in non-vocational programs. However, subject enrolments in vocational ACE programs, as a proportion of all ACE activities, have been higher than subject enrolments for non-vocational programs. As a proportion of all VET programs, subject
enrolments in vocational ACE programs, on average were about 4.5%. Similarly, annual hours recorded in vocational ACE were higher (almost two thirds) than in non-vocational programs. Annual hours in vocational ACE, as a proportion of all VET programs remained at about 4%.

The data shows that non-vocational ACE programs were more popular with women who made up about two thirds of the ACE student population. There were more men in mainstream VET.

Although students from capital cities made up the largest proportion of ACE participants, among the remaining groups it was students from other areas (rural, other metropolitan, remote) who took up more vocational ACE than non-vocational ACE. Campus-based delivery of ACE, particularly in vocational programs, was most popular with students in all program types over the last five years. This implies that ACE students prefer campus-based or face-to-face interactions to other modes of delivery.

In the last three years, those with a Year 12 qualification made up the highest number of students in ACE programs, while their numbers remained the highest for all VET. An increase in the number of students with a Bachelor degree or higher degree qualification was noted particularly in non-vocational ACE programs.

Mixed Field Programmes, Society and Culture, and Management and Commerce remained the top three fields of study in the ACE sector. In the VET sector they were Engineering and Related Technologies, Management and Commerce, and Society and Culture.

Qualifications resulting from vocational ACE programs were mainly Subject only - no qualification, Certificate II and Certificate III. For non-vocational ACE programs Subject only - no qualification, non award courses and Statement of attainment were common until 2005 when Subject only – no qualification, Year 12, and non award courses were higher.

Pass rate and satisfactory completion in both vocational and non-vocational ACE were high, particularly in non-vocational ACE. The pass/satisfactory completion rates of subject enrolments in ACE were well above the rates for all VET.

While the data reveals only part of the story about the contributions of ACE, there is much more to know and understand to appreciate the value of ACE.

**IMPROVING SKILLING THROUGH ACE**

The meta-analysis for this project highlights that ACE is already making a noteworthy contribution to human and social capital and that this sector is well placed to enhance its activities to achieve the outcomes of the NRA. To facilitate this, there is a need for reforms to the ACE as a sector, in particular the re-positioning of some roles and functions and re-alignment of funding arrangements. Higher levels of funding could furnish many promises and deliver significant outcomes in terms of developing skilled workers. However, such funds are not readily available, are pooled in competitive rounds, and are often allocated for specific purposes. In any case, reforms to ACE need to take into account current barriers and limitations.
Large ACE providers with RTO status, supported by public funds, already have existing resources, structures and a client base. Additional funds for professional development of staff would facilitate quality delivery that meets the AQTF Standards. In this way, they could increase delivery of accredited VET, thereby adding to the number of skilled workers. They could choose to operate on a competitive basis or approach their business through collaboration and partnerships with other ACE and local VET providers. Large ACE providers could also continue with the provision of non-vocational adult and community education to accommodate their traditional client base.

Medium and small size ACE providers could be assisted to meet the full requirements for RTO status to fulfil the AQTF Standards. More funds and support for professional development of staff would facilitate quality delivery that meets the AQTF Standards. The medium and small size ACE providers could concentrate more on the provision of non-vocational programs to create pathways into further training by large ACE providers and by other VET providers, and into employment. They could approach their business through collaboration and partnership with large ACE providers and local VET providers. It would certainly be in their interest to collaborate and form partnerships with other providers to optimise local resources for provisions to meet the local community needs. Of course, in areas where they are the sole providers of VET, such as in rural and remote regions, they should continue this aspect of business.

In a highly competitive environment, partnerships are critical for all ACE providers. Four levels of partnership could be considered: networking, coordinating, cooperating and collaborating (Himmelman, 2001). Overall, ACE providers should continue offering VET programs targeted for specific employment outcomes to meet the skills needs in the local community and/or industry area. ACE providers could take on the role of a training provider or as a broker.

The review of research for this report has identified a range of strategies that could improve ACE’s contributions to skilling the Australian workforce. Research shows that weak linkages between vocational ACE and mainstream VET prevent learners from gaining maximum credits for programs completed under ACE. This linkage needs to be strengthened. Relationships between ACE and VET need to be enhanced through better interactions. There are few well known facts about traditional ACE providers. They are well placed to provide pre-training and to improve pathways into VET programs or further training or learning. ACE is widely recognised for its role in developing personal and social skills and ‘generic’ skills which relate to ‘life and employability skills and attributes’. Sanguinetti et al. (2004, p. 70) assert that the development of ‘autonomy’, ‘self-mastery’ and ‘self-direction’ are important because they underpin the development of all other skills. They contend that the development of ‘interpersonal skills’ that support ‘work readiness and work habits’; ‘enterprise’; ‘entrepreneurship, creativity and innovation’; and ‘learning, thinking and adaptability skills’ are also critical. ACE providers are better positioned to facilitate the development of these attributes.

The strategies suggested in this report need to be explored by government authorities and ACE providers to implement changes that will enhance the sector’s contribution to the National Reform Agenda and the development of human and social capital.
RECOMMENDATIONS

The authors recommend actions in five areas:

- More supplementary and qualitative data using methodologies such as *Most Significant Change* and *Appreciative Inquiry* is collected to gain a better understanding of ACE contributions other than that recorded against activities and outcomes from government funds.
- A discussion paper is developed for further dialogue and consultation with ACE stakeholders and user groups to refine strategies and actions to improve the skilling of Australians through ACE.
- The strategies are analysed in the context of current policies on ACE and VET in Australia. Change agents and their responsibilities are identified to implement suggested strategies and actions.
- Case studies of effective partnerships between ACE and other VET providers are collated as examples to draw frameworks for other interested providers.
- Reforms to the ACE sector are considered to achieve outcomes against the human capital development goal in the National Reform Agenda.
ACE AND AUSTRALIA’S HUMAN CAPITAL

This project analysed current provisions of vocational and non-vocational ACE programs to explore ways in which ACE could make a greater contribution to the human capital development outcome under the National Reform Agenda (NRA) and to increase the number of skilled workers. This study is critical at a time when the Australian Government is planning activities for the NRA, there is an urgent need of skilled workers, the ageing population is seeking pathways and opportunities for economic outcomes, and traditional VET providers are unable to meet the demand.

There is much diversity in the perceived role and activities of ACE. Researchers have found it challenging to create a profile that depicts the whole sector, particularly in the absence of much reliable, valid and comparable data on ACE activities and outcomes. However, there is evidence indicative of ACE’s assistance in re-engaging with learning and training, and initiating pathways to more training or employment. The potential for ACE to make a bigger contribution to skilling Australia is recognised by governments across Australia (Senate Employment, Workplace Relations, Small Business and Education Committee, 1997). Yet policy changes to facilitate an increased role of ACE in the skilling process, and resourcing of the ACE sector continue to receive less attention.

This report proposes reforms to the ACE sector, in particular, strategies for training for employment outcomes and training for improved pathways for VET.

BACKGROUND

Adult and community education (ACE) has operated largely as an informal education sector in Australia for over 100 years. The informal nature is evident in its most outstanding feature – the diversity to address community needs at the local level. The ACE sector has evolved gradually through policy reforms influencing changes to, for example, flexible and lifelong learning, the open training market, community capacity building, and human and social capital.

For historical and political reasons, the ability to respond locally occurs through a variety of provider and program models, variously funded and supported by State and Territory governments. Modern information and communication technologies (ICT) have enabled ACE to be delivered directly to local community members and increasingly to diverse communities of interest. This diversity is both a strength – the ability to address local needs in ways other larger providers or organisations may not be able to do – and a weakness of the sector – appearing to be fragmented so that the market place may not understand what they do. However, analysts such as Clemans et al. (2003) and Saunders (2001) have reported ACE’s significant contribution to ‘just in time’, ‘just what I need’, ‘just for me’ education and/or training, as well as personal development programs.

The responsiveness of ACE means that the sector and its programs have made valuable contributions to the quality of social and economic life particularly in local communities. ACE programs provide individuals with personal enrichment, and general and vocational education. The balance between the roles of ACE
usually depends on local needs and more recently, available government funding. The sector is regularly very responsive to changing community needs and government priorities. It is this particular function that has drawn ACE into the lifelong learning/learning debate as one model for sustaining communities. The model continues to respond to (at varying levels) the Australian government priorities around:

- the ageing population
- changes to the labour market
- skills deficits and shortages
- working with a culturally diverse labour force
- the increasing use of ICT in the workplace and communities.

Without the availability of current and complete national data on ACE activities and outcomes, it is impossible to measure ACE’s success in helping to address national issues at the local level. The limited available data does indicate that ACE is a significant pathway into vocational education and training (VET) particularly for people in rural and remote areas where other education and training providers may not operate (Saunders, 2001). Existing datasets, like the one maintained by NCVER, are largely quantitative and report only on government funded ACE activities and outcomes.

To provide a better understanding of the difference made by ACE, quantitative data needs to be supplemented with qualitative data collected using methodologies such as *Most Significant Change* (Davis & Dart, 2005) and *Appreciative Inquiry* (Melush, 2000). The *Most Significant Change* technique of research is based on stories about changes that participants experienced during and as a result of a particular program. They provide an account of their perceptions about important experiences, achievements and outcomes within their individual contexts. *Appreciative Inquiry* (AI) is a positive, constructive, forward-looking approach to enhancing the ability to do more of those initiatives and activities that are generating positive results. This methodology is based on a set of four principles:

- The best of what exists is *appreciated*.
- Knowledge of what works and what is possible is *applied*.
- New and creative approaches are *provoked*.
- *Collaboration* results in harnessing collective capacity, expertise and resources and in their development (Mellon, 2000).

The richness of qualitative data gathered from these methodologies would provide a better profile of ACE and its contributions to individual and community development.

The ACE sector continues to address the social and economic priorities, including skills shortages. This demonstrates the sector’s holistic approach to meeting the learning needs of individuals and communities at the local level. The importance of informal and lifelong learning for helping people cope with a changing society and workplace needs to be better understood. Statistics Canada and the OECD (2005) found “... that unpaid work and informal learning ... have distinct links with paid work and formal education”. Indeed the informal and lifelong learning
ACE’s role in developing Australia’s human capital

that ACE so well provides can lead to human capital development under the National Reform Agenda (NRA) of the Council of Australian Governments (COAG).

RATIONALE FOR THE PROJECT

Since its inception, activities of the ACE sector have been analysed and reviewed by several researchers (e.g. Clemans, Hartley & Macrae, 2003; Golding, Davies & Volkoff, 2001). Reviews have focused on different aspects of ACE. A range of projects and research have developed various profiles of the ACE sector and its provisions, highlighting the diversity in the perceived role and activities of ACE. Research shows that ACE has undoubtedly assisted many people to re-engage with learning and training, and initiated pathways to further training or to employment.

For the purpose of this report, a meta-analysis was conducted to explore ACE’s role and further potential to assist with the immediate skills shortages by creating pathways to training, leading to individuals who are employable in industries. Furthermore, ACE’s role in achieving the COAG’s objectives around the development of human capital under the NRA (February, 2006) was examined. ACE is well positioned to achieve the following outcomes of the NRA:

- Increase the proportion of adults who have the skills and qualifications needed to enjoy active and productive working lives.
- Improve overall workforce participation, with a particular focus on income support recipients, the mature aged and women, in a manner consistent with the long term interests of the individual and the economy, giving due regard to productivity.
- Increased provision of flexible working arrangements within the workforce, in a manner consistent with the long term interests of the individual and the economy (COAG, 2006).

Reforms to the ACE sector can allow a greater contribution towards the COAG agenda as well as skilling Australia. However, any reforms to ACE need to appreciate the role of this sector in meeting the needs of the traditional user groups. Reforms to funding policies for predominantly vocational outcomes, for instance, would exclude and disenfranchise a growing number of the traditional beneficiaries of ACE.

Australia is in urgent need of skilled workers and the ageing population is seeking pathways and opportunities for economic outcomes. The current arrangements under ACE are limited in meeting the expanding needs in these two areas. Therefore, it is timely to assess this sector’s existing resources and structures to assist with the NRA, thereby meeting the need for more skilled workers. ACE can be re-positioned to enhance pathways for adult learners to increase their opportunities for employment or further training to meet the skills gaps. The potential for ACE to make a greater contribution to skilling Australia is recognised by governments across Australia (Senate Employment, Workplace Relations, Small Business and Education Committee, 1997). Yet policy changes to facilitate an increased role of ACE in the skilling process, and resourcing of the ACE sector continue to receive less attention.
ACE’s role in developing Australia’s human capital

The meta-analysis for this project informed strategies to enhance the role of the ACE sector to meet the human capital development outcome under the NRA and for increasing the number of skilled workers.

Three research questions were investigated for this study:

• What does the current profile of the ACE sector look like?
• How is ACE contributing to the development of human capital and increasing the number of skilled workers?
• How can ACE enhance its contributions to the development of human capital and increase the number of skilled workers?

This exploratory piece of research involved a meta-analysis of a range of documents including research reports, discussion papers prepared for and by Adult Learning Australia, policy documents, reports of the Industry Skills Councils, and commentary and publications by NCVER and leading adult educators in Australia. Profiles were reviewed to understand the scope of provisions by ACE. Strengths of the ACE sector that had particular relevance to learning and skilling were identified. Examples of current provisions that contribute to the skills deficit were examined. The project also reviewed literature and commentaries relating to the skills shortages in Australian industries. Desktop research was complemented by an analysis of NCVER data on ACE programs and activities from 2001 to 2005.

The meta-analysis informed suggestions on how ACE can make a greater contribution to the NRA and to reducing the skills deficit. A set of draft strategies to enhance ACE provisions were drawn for further discussion and consultation.

THE NATIONAL REFORM AGENDA (NRA)

At its meeting on 14 July 2006, the COAG reaffirmed its commitment, agreed in February 2006, to progress the National Reform Agenda. The NRA includes human capital, competition and regulatory reforms, aimed towards Australia’s future prosperity by increasing the nation’s productivity and workforce participation. New policy directions will focus on agreed outcomes and commitments at federal and jurisdictional levels to achieve reforms on agenda.

The framework for human capital reforms will focus initially on four priority areas, namely: early childhood; diabetes; literacy and numeracy; and child care. While ACE can play a part in achieving the outcomes in these areas, it is the indicative outcomes against the human capital agenda that is of interest to this project, in particular:

• increasing the proportion of young people meeting basic literacy and numeracy standards, and improving overall levels of achievement
• increasing the proportion of young people making a smooth transition from school to work or further study
• increasing the proportion of adults who have the skills and qualifications needed to enjoy active and productive working lives
improving overall workforce participation, with a focus on target groups, in a manner consistent with the long-term interests of the individual and the economy, giving due regard to productivity.

Responding to the above outcomes will reduce the skills shortages experienced by industry across Australia.

AUSTRALIA’S SKILLS SHORTAGE

Australia’s ability to be globally competitive is under considerable pressure due to skills shortages experienced by industries across the nation. The magnitude and seriousness of the skills shortage problem in Australia was recently expressed by the Australian Industry Group (2006): “… skills have never been more important to Australian business”. Research continues to identify chronic skill shortages, particularly in the traditional trades, which cannot be satisfied by existing training levels (see Appendix A for a summary of skills shortages by industry).

Many employers also report deficiencies in basic ‘soft’ skills such as literacy and numeracy, and employability skills (e.g. punctuality and attitude), as well as higher level ‘soft’ skills that include a willingness to learn, good communication and teamwork, and problem solving skills (Allen Consulting Group, 2006, p. ix). The problem continues to be exacerbated by the ageing workforce.

In the latest report prepared for the Australian Industry Group, *World Class Skills for World Class Industries*, the Allen Consulting Group (2006) found an overwhelming majority (eight in ten) of Australian companies agreeing “… that building their skills base is the key to achieving international competitiveness” and “… industry will increase spending on skilling by 30 to 50 percent over the next three years” (p. ix). The Allen Consulting Group (2006) predicts employers will require skilled employees to have a higher level and broader range of skills, and to update their skills more often than in the past. Australian companies are increasingly using a number of strategies to overcome the shortfall in skilled employees, such as (p. xiv):

- retaining existing staff
- increasing investment in training
- redesigning jobs
- retaining mature age workers
- investing in plant and equipment
- reducing staff turnover
- recruiting from a range of sources including from overseas.

Skilled migration in Australia’s migration program is one of many strategies for addressing skills shortages. However, according to the Productivity Commission (2006), skilled migration is insufficient and remains a short term solution.

A *National Skills Forum* in 2005 alluded to the ageing workforce, skilled migration and the duration of apprenticeships as the key reasons for skills shortages. The Australian Government implemented the *National Skills*
Shortages Strategy to address skills shortages in regional areas where it is most needed.

Skilling Australia – New Directions for Vocational Education and Training (VET) is the Government’s new policy to reduce the skills deficit and meet industry demands. Underpinning this policy are initiatives focusing on productivity linked to future economic growth, profitability of business, the ageing population, and workforce development. While the fundamentals of Skilling Australia are about reducing the skills deficit, this policy also demonstrates a shift in thinking. It is about valuing learning for the life course and for every aspect of life as well as for work, as well as valuing all types of learning and the institutions that provide this service. This is about the development of human capital which extends beyond the economic rationality to sustainable social outcomes. The policy recognises that learning stimulates creativity and innovation in the workplace. It also recognises that there should not be a hierarchy of learning with some sectors more valued and supported than others.

Essentially, the vision of Skilling Australia and vocational training and education (VTE) is for a flexible, responsive national system of education and training available to all Australians - facilitated by the smooth transitioning between sectors to best meet the needs of clients and industry. Accordingly, in its 2005–2006 budget the Australian Government supported its policy in Backing Australia’s Skills: Reinvigorating the Vocational Training and Education System. This policy contains more than $1 billion of new initiatives in career education, training for skills excellence, scholarships, residential support, youth allowances, and support for additional New Apprenticeships, school based apprenticeships and pre-vocational training.

A greater role for ACE in implementing the NRA or addressing skills shortages will not be without a multiplicity of changes to, for example, funding levels, quality, differing State and Territory approaches to training and accreditation, over regulation and the issue of industry leadership, Australia’s ability to be globally competitive, impacts arising from changing technology and workplace relations, employers’ failure to invest in training, and the poor public perception of training. These must be responded to. Within this complex context, there is a place for adult and community education (ACE) for the NRA on human capital and the VTE agenda. How to position the ACE sector to increase its input is yet to be strategised.

The composition of the workforce is changing due to demographics with an ageing population, the need for global competitiveness, and rapid changes in technology. According to DEST (2002):

Some skill shortages can and do exist at most stages of the business cycle in skilled occupations. What varies is their extent over different stages of the business cycle. Skill shortages are often evident in industries and occupations with modest or subdued employment growth, or even in situations of overall employment decline. .... Despite some of the issues being generic across all or most skilled occupations, the solutions and plans for action really need to be tailored and customised to the conditions applying in particular industries and occupations. (p.2)
An important realisation from ANTA (2005), however, is that:

... skill needs can be met not just by education and training, but also through job redesign and changes to recruitment policy and practice, and employee relations. Some skills shortfalls can only be remedied through in-house approaches due to the specific skills required. (p. 3)

Data on the demand for skills in each State and Territory collated by the Department of Employment and Workplace Relations in 2005 highlight several concerns:

• Shortages can apply across an industry or to specialised jobs within an industry – automotive trades or nursing are experiencing shortages industry wide while each State and Territory have differing information and communication technology (ICT) skill needs.

• Shortages can apply Australia wide as with plumbers and hairdressers while others are localised to one State or Territory, as with Victoria’s secondary teaching shortages.

• Skills shortages can be Australia wide where the industry is national (as with the automotive, construction and electrical trades), or related to a specialised industry in particular geographical areas (as with the mining industry).

• Skills shortages exist in high profile professions like law, engineering and accounting; in traditional trades that experience image problems with attracting new workers; and in the new high technology industries and trades like ICT. Some shortages are due to recruitment problems while others are due to sheer workforce demand in areas that are not able to recruit new employees.

• In industries where there are national skills shortages in all but one or two States, as with child care, other factors such as economic or demographic changes, training issues, wage rates and/or IR legislation may play a significant role in helping to create or address industry skill needs.

Recent discourses and responses from government and industry endorse that building the nation’s skills base is the most important strategy for remaining competitive internationally in the coming years. Considering that ACE can make a greater contribution to building the skills base, it is important to understand the role and functions of ACE.

THE ROLE AND FUNCTIONS OF ACE

The Ministerial Declaration on Adult Community Education (ACE) was formulated in recognition that economic success is largely driven by workforce skills, capabilities and creativity. State, Territory and Commonwealth Ministers with responsibility for Education, Employment, Training and Youth Affairs endorsed the Declaration at the 13th meeting of MCEETYA in July 2002. The Declaration remains the main framework for the ACE sector.

The following four goals of the Declaration provide strategic directions for ACE activities in each jurisdiction:

• Expand and sustain innovative community based learning models.
• Raise awareness and understanding of the role and importance of adult community education.
• Improve the quality of adult community education learning experiences and outcomes.
• Extend participation in community based learning.

Aligned to the goals are enabling strategies to guide authorities in developing and designing ACE provisions to achieve outcomes relating to the goals.

When first established, the primary role of the ACE sector was to provide general education that focused on lifestyles, recreation, leisure, personal enrichment, equity, literacy, numeracy and domestic food preparation (Saunders, 2001). The courses are still affordable to a majority. ACE continues to provide an informal, non-threatening and nurturing environment which appealed to, and empowered many participants who would otherwise not engage in learning or training.

Nowadays, ACE programs include accredited and non-accredited learning programs with or without vocational outcomes. Participants in ACE programs are increasingly applying what they learn for vocational purposes. According to Volkoff, Golding and Jenkin (1999, p. 5) such “vocational intentions reside within the individuals rather than within particular programs”. Some ACE participants value personal development as being equivalent to vocational outcomes because it enables them to make social contributions and participate in the community development. It is this group of participants interested in personal development who would be disadvantaged by any reforms in ACE if there is a greater emphasis on vocational outcomes.

The demand for vocationally oriented learning surfaced from the participants themselves and so ACE has responded accordingly to meet their needs by playing an increased role in developing them for the workforce. Learning and education for some translates into human and social capital with economic returns. This harmonises well with the human capital outcome under the NRA.

While the proportion of participants developed as skilled workers ready for the workforce is less compared to the VET sector, ACE continues to expand provision of accredited and non-accredited vocational education and training (see the section on ACE performance for further details). Furthermore, ACE continues to provide pre-training to those who have limited VET learning experiences, those who have not engaged in formal learning for some time, and those who may have had unpleasant learning experiences in other institutions. ACE has provided learning pathways to many participants who could not enrol in VET programs. It plays a ‘value-adding’ role to meet the intrinsic learning needs of people by assisting them to gain confidence to undertake further learning and skills development and to manage transition from training to employment. ACE learning is highly focused, often short in length, and aimed at providing learners with desired knowledge and skills in a friendly, supportive environment (Saunders, 2001, pp. 3-4). ACE pedagogies are known for the development of five skill clusters described by Sanguinetti et al. (2004, p. 66):

• Autonomy, self-mastery, and self direction: central and underpinning skills
• Work readiness and work habits
• Enterprise, innovation and creativity skills
• Learning, thinking and adaptability skills
• Interpersonal skills.

Evidently, the role of ACE has evolved in response to the needs of its client groups. When the needs of clients constantly change to which ACE responds accordingly, establishing exactly what ACE is or what it does becomes problematic. Golding et al. (2001) explain the role of ACE using four competing ACE discourses as illustrated in Figure 1. Irrespective of the framework used for analysing the role of ACE, its provisions lead to improving the quality of adult and community learning experiences and outcomes – the third goal set by the Ministerial Declaration. It continues to build the human and social capital at the community level.

Figure 1: Competing ACE discourses

<table>
<thead>
<tr>
<th>Hierarchial</th>
<th>Professional ACE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Managerial ACE</td>
<td>ACE as a service provider</td>
</tr>
<tr>
<td>ACE as a program</td>
<td>For personal fulfilment</td>
</tr>
<tr>
<td>For the pursuit of social and economic objectives</td>
<td>ACE provider as facilitator of learning</td>
</tr>
<tr>
<td>ACE provider as program manager</td>
<td>Accountable to client and profession</td>
</tr>
<tr>
<td>Accountable to management</td>
<td>Provider &amp; client-based research</td>
</tr>
<tr>
<td>Program-based research</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Context</th>
<th>Anarchist</th>
</tr>
</thead>
<tbody>
<tr>
<td>Market ACE</td>
<td>Community ACE</td>
</tr>
<tr>
<td>ACE as a commodity</td>
<td>ACE as participation</td>
</tr>
<tr>
<td>For the customers’ consumption</td>
<td>For the citizen’s empowerment</td>
</tr>
<tr>
<td>ACE provider as broker or entrepreneur</td>
<td>ACE provider as community enabler</td>
</tr>
<tr>
<td>Accountable through customer choice</td>
<td>Accountable through democratic decision-making</td>
</tr>
<tr>
<td>Market-based research</td>
<td>Context-specific, action-based research</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Despite ACE’s record in meeting client needs, there is inadequate understanding of the nature and significance of ACE. There appears to be little appreciation of the significance of ACE’s contributions in Skilling Australia or Backing Australia’s Skills, particularly in the following key areas:

• Learners’ participation in ACE and their subsequent pathways to further education and training and/or employment as a result of this participation.
• Client groups not reached by formal education and training and ACE’s ability to successfully encourage their engagement in learning.
• ACE’s contribution to community capacity building through learning.
• The community benefits derived from ACE through its partnerships, local focus, and innovative and flexible approaches to program delivery.
• The distinctive characteristics of ACE centres and programs that lead to successful outcomes for learners.

To explore how ACE can increase its contributions to the NRA and narrow the skills deficit, it is necessary to understand ACE activities across Australia.
Profiling ACE

Researchers in Australia have used a range of frameworks to scope the ACE sector. Three recent projects funded by the National Centre for Vocational Education Research (NCVER) form key sources of information:

- A consolidation of ACE research 1990-2000 by Golding, Davies & Volkoff (2001) collected and consolidated the large body of qualitative and quantitative research to present key findings from contemporary research on adult education in Australia.
- Scope of ACE in Australia by Borthwick, Knight, Bender & Loveder (2001) focused on ways to improve data collection and reporting for the sector.
- ACE outcomes by Clemans, Hartley & Macrae (2003) identified the full range of ACE services and clients.

The above projects and other research informed NCVER’s (2003, p. 3) definition of ACE as “... all educational and training activity which is delivered by community-based or community-managed organisations that provide learning opportunities for adults”. These activities are regarded as vocational i.e. programs that have a vocational focus and are designed to equip students with specific skills; and non-vocational i.e. programs that are primarily directed at the overall personal, cultural and social development of an individual. The ACE sector offers a broad range of programs to adults “... including general, vocational, basic and community education, and recreation, leisure and personal enrichment programs” (NCVER, 2006, p. 15).

The meta-analysis for this report draws on recent research on scoping ACE. The nature of provisions under ACE is derived from limited education and training data that is available from the NCVER. Note that the NCVER dataset, though limited, remains the most comprehensive. Research by Borthwick et al. (2001, p. 2) found that the national collection does not reflect all activity in Australia’s ACE sector and identified several gaps in the reported data:

- Most activity offered by the U3A and Schools for Seniors in States/Territories other than Victoria as well as some of Victoria’s U3A activity.
- Some activity delivered by Community and Neighbourhood Houses, Community Adult Education Centres and Community Learning Centres.
- Non-TAFE activity in Western Australia.
- Non-vocational adult education programs and evening classes delivered at some Australian universities and libraries and by the Evening and Community College’s Association.
- Some recreation, leisure or personal enrichment activity at TAFE centres, which allows community access to TAFE facilities in accordance with State/Territory policies.
- Some activity at private and government secondary schools.
- Private recreation, leisure and personal activity, such as that provided through cultural associations like Alliance Francaise, health centres and dance studios.
ACE’s role in developing Australia’s human capital

A system of education and training data collection (such as AVETMISS) that exists for the VET sector has not yet been established for the ACE sector. Developing a profile of ACE based on available data is problematic, as questions about the reliability, validity and comparability of data across States and Territories arise. Borthwick et al. (2001, pp. x-xi) recommended some strategies to improve data collection and reporting in the ACE sector:

- Collecting more information about participation in ACE through the ABS education and training survey or other relevant instruments.
- Undertaking scoping exercises on ACE provision every three to five years, which would require State and Territory authorities keeping up-to-date registers of providers.
- Conducting a pilot project to assess the feasibility of collecting summary statistical information that would involve a diverse cross-section of ACE providers.

In the absence of a national database of ACE activities, the contribution and potential of the ACE sector to skilling Australia is difficult to establish. Golding et al. (2001, p. 47) argue that ACE could not be regarded as a national sector because States and Territories have different ACE histories and because of the diversity of ACE across Australia. Besides, funding arrangements and contributions by ACE differ greatly by jurisdiction. There is confusion between data on ACE providers and ACE programs where these two categories are sometimes used interchangeably. ACE programs could also be delivered by providers not necessarily categorised as an ACE provider.

A preliminary analysis of data on the number of ACE providers (Choy & Haukka, A National Database of Australian ACE Providers: Preliminary Analysis of Sector Size, Enrolments and Outcomes 2001-2005, 2006) recorded 1,027 providers across Australia. Table 1 on the following page shows the spread of providers categorised into four tiers:

- Tier 1: Large RTOs with annual government funding of $100,000 and above. Some 13.7% of all RTOs in Australia are large providers (data available from Victoria and New South Wales only).
- Tier 2: Small to medium RTOs with annual government funding, less than $100,000. These providers amount to about a quarter, or 28.6% of providers (Victoria and New South Wales only).
- Tier 3: RTOs that could not be categorised as Tier 1 or Tier 2, comprising 11.6% of the dataset.
- Tier 4: Those providers who are not RTOs, approaching one half of the 1,027 organisations in the dataset, or 45%.

ACE providers from only Victoria and New South were categorised into Tier 1 or Tier 2. Data for Victoria was extracted from the ACFEB Annual Report 2004-2005. The funding data for New South Wales data was from an unpublished source. Details about funding and/or student contact hours were not made available for other States and Territories. Although NCVER maintains data on individual RTOs, due to confidentiality reasons, such data could not be accessed as without written approval from the RTOs was required.
### Table 1: Tier categorisation of ACE providers

<table>
<thead>
<tr>
<th>State/Territory</th>
<th>Tier 1: Large RTO</th>
<th>Tier 2: Small-medium RTO</th>
<th>Tier 3: RTO not categorised</th>
<th>4: Non-RTO</th>
<th>Total ACE Providers</th>
</tr>
</thead>
<tbody>
<tr>
<td>VIC</td>
<td>100</td>
<td>284</td>
<td>6</td>
<td>58</td>
<td>448</td>
</tr>
<tr>
<td>NSW</td>
<td>41</td>
<td>10</td>
<td>unknown</td>
<td>11</td>
<td>62</td>
</tr>
<tr>
<td>SA</td>
<td>unknown</td>
<td>unknown</td>
<td>76 *</td>
<td>55</td>
<td>131</td>
</tr>
<tr>
<td>QLD</td>
<td>unknown</td>
<td>unknown</td>
<td>32</td>
<td>110</td>
<td>142</td>
</tr>
<tr>
<td>TAS</td>
<td>unknown</td>
<td>unknown</td>
<td>unknown</td>
<td>116</td>
<td>116</td>
</tr>
<tr>
<td>ACT</td>
<td>unknown</td>
<td>unknown</td>
<td>16</td>
<td>21</td>
<td>37</td>
</tr>
<tr>
<td>WA</td>
<td>unknown</td>
<td>unknown</td>
<td>unknown</td>
<td>72</td>
<td>72</td>
</tr>
<tr>
<td>NT</td>
<td>unknown</td>
<td>unknown</td>
<td>unknown</td>
<td>19</td>
<td>19</td>
</tr>
<tr>
<td><strong>AUSTRALIA</strong></td>
<td><strong>141</strong></td>
<td><strong>294</strong></td>
<td><strong>130</strong></td>
<td><strong>462</strong></td>
<td><strong>1027</strong></td>
</tr>
</tbody>
</table>

* The NCVER included 78 ACE providers from South Australia in its appendix of training providers which delivered publicly-funded VET in 2005. Although most of these providers have been treated as RTOs in this project, they do not appear in the NTIS database as RTOs.

Just over half (565 or 55%) of the 1,027 providers are Registered Training Organisations. This figure is slightly above 537 providers recorded as RTOs by the NCVER (2006). The difference may lie in some State and Territory sources including private providers in their lists of adult and community education providers.

In Victoria, 22.3% of providers were categorised as Tier 1; 63.4% as Tier 2; 1.3% as Tier 3; and 12.9% as Tier 4. The data shows that most ACE providers are small to medium in size. In New South Wales, 66.1% of the ACE providers were categorised as Tier 1; 16.1% as Tier 2; and 17.7% were non-RTOs. Unlike in Victoria, most ACE providers in New South Wales were large in size and supported with over $100,000 in public funds.

It could be assumed that all accredited training led to vocational outcomes and that such training was provided by registered training organisations (RTOs). Drawing any conclusions based on this assumption to assess the contribution of ACE to human capital development or skilling the workforce at a national level would be flawed – firstly, because a total of 435 RTOs based in Victoria and New South Wales do not represent the whole sector; and secondly, the dataset is incomplete and it is likely that ACE RTOs in other States and Territories are not captured.

The manner in which ACE RTOs are organised and funded varies across jurisdiction. A lack of cohesion across jurisdictions makes it difficult to define ACE. Golding et al. (2001) prefer ACE to be understood as a sector within each State and Territory. They refer to Crombie’s (1996) typology of Australian ACE and TAFE (see Figure 2); noting that by 2000 ACE had largely been folded into TAFE in Tasmania, Queensland and Western Australia. In the Northern Territory, ACE is community owned and managed, serving a large number of Indigenous communities. However, ACE remains unrecognised per se (Golding et al. 2001, p. 40).
ACE’s role in developing Australia’s human capital

Figure 2: Australian ACE and TAFE typology

<table>
<thead>
<tr>
<th>Well-developed community ACE provision</th>
<th>Minimal support for community ACE provision</th>
</tr>
</thead>
<tbody>
<tr>
<td>State-supported and coordinated ACE sectors</td>
<td>Recognised ACE provision including TAFE</td>
</tr>
<tr>
<td>Victoria</td>
<td>Western Australia</td>
</tr>
<tr>
<td>New South Wales</td>
<td>Queensland</td>
</tr>
<tr>
<td></td>
<td>Tasmania</td>
</tr>
<tr>
<td>Well-developed systems of community provision</td>
<td>ACE not recognised per se</td>
</tr>
<tr>
<td>South Australia</td>
<td>Northern Territory</td>
</tr>
<tr>
<td>Australian Capital Territory</td>
<td></td>
</tr>
</tbody>
</table>

Golding et al. (2001), Figure 2, p.40

ACE serves participants who are members of the general community aged from teens to 90 years; men and women; people who are poor and people who are relatively affluent; people seeking work skills and work qualifications and those following an interest; employed people, unemployed people and retired people; people from all linguistic and cultural background groups in the Australian population; people with intellectual and/or physical disabilities; people who have primary education only and people who have tertiary qualifications; people living in urban, regional and rural areas; and people who pay for their courses and those who do not (Clemans et al. 2003, pp. 17-27).

ACE programs and services can be categorised into foundation education, including language, literacy and numeracy; English as a second language; personal development; specific vocational education programs (including traineeships, industry training and employment services); general citizenship; and volunteer training.

ACE providers offered either a mix of accredited and non-accredited programs; non-accredited programs only; and accredited programs only. Factors underpinning their decisions about programs included “having a feel” for the community needs; reading the community demographics; monitoring data (what is demanded and what is not); consultations with staff, committee members and students; and responding to State and Territory policy and funding initiatives.

A slight shift in ACE participation patterns was noted in computer classes and working bees. These areas saw a greater interest and engagement by men. Many ACE participants were using volunteerism as a pathway to paid work as part of mutual obligation requirements. More vocationally oriented courses meet the needs of marginalised and/or unprovided groups (e.g. non-English speaking background, people with a disability). ACE providers have responded to changes in community needs by changing the nature of programs. Clemans et al. (2003) found that in Victoria there was an increase in the number of people in their teens and early 20s using ACE programs and services.

Beyond specific programs and services, ACE is playing an active role in engaging and building communities by developing and strengthening networks, building community resources, and participating in community development projects.

An overview of ACE policy and activities in each State and Territory is provided in Appendix B. Limited information was located about Queensland ACE and no information about Northern Territory ACE could be accessed.
ACE PERFORMANCE

The State and Territory policies of each jurisdiction suggest a growing commitment by Governments to ACE. However, data on education and training by ACE providers is under represented because such data relates only to public funded activities such as accredited vocational programs. In this case such data complies with the Australian Vocational Education and Training Management Information Statistical Standard (AVETMISS). Notwithstanding strict compliance guidelines, discrepancies are still evident. For example, the NCVER (2002) estimated total ACE activity of between 1.1 to 1.3 million people in 2000; yet only 477,800 students were reported in the national VET data collection in that year. In view of this type of discrepancy, the following analysis of ACE provisions is based on data that may exclude up to one half of the total number of people who participated in ACE.

The latest ACE data obtained from NCVER (2006) provided a glimpse of ACE programs and activities. This data covered the period 2001 to 2005. Nine sets of data were viewed to synthesise trends in ACE enrolments and outcomes.

It is necessary here to caution readers about drawing any general conclusions from the analysis in this section. Some basic understanding of the nature of the ACE data is fundamental for correct conceptualisation of the analysis. Firstly, a recap of how ACE is defined by NCVER (2006, p. 3):

... all educational and training activity which is delivered by community-based or community-managed organisations that provide learning opportunities for adults.

The following points are of significance when viewing the NCVER data:

- Vocational ACE data = programs that have a vocational focus and are designed to equip students with specific skills. These are delivered by ACE providers who meet the above definition.
- Non-vocational ACE data = programs that are primarily directed at the overall personal, cultural and social development of an individual. This data includes non-vocational programs and activities delivered by not only the traditional ACE providers, but also by TAFE, enterprises and other RTOs, and non-RTOs.

Considering the nature of the NCVER data on ACE activities, it is indeed difficult to talk in terms of the provision of vocational or non-vocational programs by the ACE sector. Only vocational programs delivered by traditional ACE providers are differentiated. The NCVER dataset remains the most comprehensive set and can be said to have reasonably captured ACE activities across Australia. In an environment when reporting on ACE activities is not mandatory, there are pockets of data that remain outside these data sets. For example, some non-vocational ACE activities (e.g. recreation) from New South Wales are not added. Similarly, there are other data that could be added to the existing sets.
ACE STUDENTS, SUBJECT ENROLMENTS AND ANNUAL HOURS BY PROGRAM

In 2005, 376,449 students participated in vocational and non-vocational programs delivered by the ACE sector. These students accounted for 791,708 subject enrolments and just over 19 million annual hours. Although these latest figures are lower than that recorded in the peak year of 2001, the number of "vocational" hours delivered by the ACE sector was at an all time high of 15.3 million annual hours in 2005. The decline in ACE students, enrolments and annual hours in 2004 was due in part to problems with software compatibility when many providers introduced new systems in New South Wales.

Student enrolments

Figure 3 illustrates the distribution of students participating in vocational and non-vocational ACE between 2001 and 2005.

Figure 3: Students in vocational and non-vocational ACE (2001-2005)

The total number of students enrolled in vocational ACE as a proportion of all ACE activities and as a proportion of all VET delivered across Australia between 2001 and 2005 is illustrated in Table 2.

Table 2: Proportion of ACE students participating in vocational and non-vocational ACE programs and all VET programs (2001-2005)

<table>
<thead>
<tr>
<th>Year</th>
<th>Students in vocational ACE programs</th>
<th>Students in non-vocational ACE programs</th>
<th>Students in vocational ACE as a proportion of students in all VET</th>
</tr>
</thead>
<tbody>
<tr>
<td>2001</td>
<td>48.0%</td>
<td>52.0%</td>
<td>14.2%</td>
</tr>
<tr>
<td>2002</td>
<td>44.6%</td>
<td>54.4%</td>
<td>12.7%</td>
</tr>
<tr>
<td>2003</td>
<td>53.6%</td>
<td>46.4%</td>
<td>14.2%</td>
</tr>
<tr>
<td>2004</td>
<td>44.3%</td>
<td>55.7%</td>
<td>10.7%</td>
</tr>
<tr>
<td>2005</td>
<td>53.1%</td>
<td>46.9%</td>
<td>12.2%</td>
</tr>
</tbody>
</table>

The distribution of student enrolments in vocational and non-vocational ACE programs ranged between about 44.3% and 53.6%. Just over half of the students enrolled in ACE participated in non-vocational activities in 2001, 2002 and 2004. The proportion of students in vocational ACE was higher in 2003 (53.6%) and 2005 (53.1%).
Students enrolled in vocational ACE programs ranged between 10.7% and 14.2% of students enrolled in all VET programs in Australia over the last five years. On average about 12.8% of VET was recorded as vocational ACE during the period from 2001 to 2005.

The spread of students in all ACE programs and vocational ACE programs across Australia in 2005 is as follows:

- **New South Wales** accounted for 44.4% of all ACE students in Australia and 48.1% of ACE students enrolled in vocational programs in Australia.
- **Victoria** accounted for 41% of all ACE students and 42.3% of ACE students enrolled in vocational programs.
- **Queensland** accounted for 0.3% of ACE students enrolled in vocational programs but did not report any non-vocational programs.
- **South Australia** accounted for 10% of all ACE students and 9.2% of ACE students enrolled in vocational programs.
- **Western Australia** accounted for 4.3% of all ACE students but did not report any vocational programs.
- **Tasmania** accounted for 0.03% of all ACE students but did not report any vocational programs.
- **Northern Territory** accounted for 0.04% of ACE students enrolled in vocational programs but did not report any non-vocational programs.
- **Australia Capital Territory** did not report ACE student numbers in vocational and non-vocational programs.

The percentage of students in vocational ACE as a proportion of students in all VET in each State and Territory in 2005 is as follows: New South Wales (17.1%), Victoria (18.4%), Queensland (0.2%), South Australia (16%), Western Australia (0%), Tasmania (0%), Northern Territory (0.4%) and Australian Capital Territory (0%).

**Subject enrolments**

The spread of subject enrolments in vocational and non-vocational ACE between 2001 and 2005 is displayed in Figure 4.

**Figure 4: Percentage of subject enrolments in vocational and non-vocational ACE (2001-2005)**
Subject enrolments in vocational ACE as a proportion of all ACE activities ranged between 56.1% and 66.2% between 2001 and 2005, as shown in Table 3.

**Table 3: Proportion of ACE subject enrolments in vocational and non-vocational programs (2001-2005)**

<table>
<thead>
<tr>
<th>Year</th>
<th>Subject enrolments in vocational ACE programs</th>
<th>Subject enrolments in non-vocational ACE programs</th>
<th>Vocational ACE programs as a proportion of subject enrolments in all VET</th>
</tr>
</thead>
<tbody>
<tr>
<td>2001</td>
<td>58.1%</td>
<td>41.9%</td>
<td>4.8%</td>
</tr>
<tr>
<td>2002</td>
<td>56.1%</td>
<td>43.9%</td>
<td>4.5%</td>
</tr>
<tr>
<td>2003</td>
<td>61.9%</td>
<td>38.1%</td>
<td>4.6%</td>
</tr>
<tr>
<td>2004</td>
<td>57.5%</td>
<td>42.5%</td>
<td>3.9%</td>
</tr>
<tr>
<td>2005</td>
<td>66.2%</td>
<td>33.8%</td>
<td>4.5%</td>
</tr>
</tbody>
</table>

The analysis of data shows that subject enrolments in vocational ACE programs are higher than for non-vocational programs. Subject enrolments in vocational programs in ACE accounted for between 3.9% and 4.8% of subject enrolments in all VET programs in Australia over the last five years. ACE providers in Victoria (53.6%) and New South Wales (38.6%) accounted for the bulk of ACE subject enrolments in vocational programs.

**Annual hours**

The spread of the annual hours in vocational and non-vocational ACE between 2001 and 2005 is shown in Figure 5. Vocational programs made up a larger proportion of ACE annual hours, rising from 69.8% in 2001 to 80.5% in 2005 (see Table 4 for exact numbers).

The percentage of annual hours of vocational ACE decreased during 2001 and 2002. In 2003 it increased and then decreased again in 2004. The percentage of annual hours of vocational ACE increased in 2005.

**Figure 5: Percentage of annual hours in vocational and non-vocational ACE**
Table 4: Proportion of annual hours in vocational and non-vocational ACE and of all VET programs (2001-2005)

<table>
<thead>
<tr>
<th></th>
<th>Annual hours of vocational ACE programs</th>
<th>Annual hours of non-vocational ACE programs</th>
<th>Vocational ACE programs as a proportion of all VET</th>
</tr>
</thead>
<tbody>
<tr>
<td>2001</td>
<td>69.8%</td>
<td>30.2%</td>
<td>4.2%</td>
</tr>
<tr>
<td>2002</td>
<td>68.9%</td>
<td>31.1%</td>
<td>4.0%</td>
</tr>
<tr>
<td>2003</td>
<td>75.4%</td>
<td>24.6%</td>
<td>4.0%</td>
</tr>
<tr>
<td>2004</td>
<td>72.5%</td>
<td>27.5%</td>
<td>3.6%</td>
</tr>
<tr>
<td>2005</td>
<td>80.5%</td>
<td>19.5%</td>
<td>4.3%</td>
</tr>
</tbody>
</table>

There was a slight decrease in student numbers, enrolments and annual hours of vocational ACE between 2001 and 2002. Such a decrease was also evident in the national total for all VET delivered during the same period. While the figures for the three sets (students, enrolment and annual hours) increased between 2002 and 2003, slight changes were noted at the national level in student numbers and enrolments. There was no change in annual hours during the same period. A decrease was noted between 2003 and 2004 which influenced the proportion at the national level. The decrease in 2004 could be attributed to discrepancies in the NSW data. A rise of around 8% was noted in all three data sets between 2004 and 2005. The national figures also increased as a result. The 8% increase related to vocational ACE, the largest experienced over the last five years, could reflect increases in funding for the provision of VET by ACE providers in Victoria and New South Wales. Whether the increase in participation was from the supply side or the demand side cannot be established. However, the figures imply that ACE clients did engage more in VET activities.

Annual hours for non-vocational ACE programs have declined from 30.2% to 19.5% over the five year period. Although more annual hours of vocational ACE programs were delivered, this as a proportion of annual hours in all VET is still relatively low. The bulk of annual hours of vocational ACE programs was delivered in Victoria (58.3%) and New South Wales (38.2%).

ACE STUDENTS BY SEX, AGE GROUP AND PROGRAM TYPE

Table 5 displays participation rates by women and men in vocational and non-vocational ACE and in all VET. The data shows that women’s participation in vocational ACE (as a percentage of total vocational activities within ACE) is almost two thirds greater when compared to participation by men. For non-vocational ACE programs, women’s participation has been generally over 70%. This implies that larger numbers of women (compared to men) access both vocational and non-vocational ACE programs. Women’s participation in all ACE activities (as a percentage of total vocational and non-vocational activities) remained just over 68% for the last five years. Participation by men in all VET programs is marginally higher than by women as illustrated in Figure 6.
ACE’s role in developing Australia’s human capital

Table 5: ACE students by sex and program type (2001-2005)

<table>
<thead>
<tr>
<th></th>
<th>Vocational ACE</th>
<th>Non-vocational ACE</th>
<th>All ACE</th>
<th>All VET</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>2001</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>32.6%</td>
<td>26.1%</td>
<td>29.2%</td>
<td>51.1%</td>
</tr>
<tr>
<td>Female</td>
<td>65.2%</td>
<td>71.9%</td>
<td>68.7%</td>
<td>48.5%</td>
</tr>
<tr>
<td><strong>2002</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>32.7%</td>
<td>26.5%</td>
<td>29.3%</td>
<td>51.6%</td>
</tr>
<tr>
<td>Female</td>
<td>65.7%</td>
<td>72.2%</td>
<td>69.3%</td>
<td>48.1%</td>
</tr>
<tr>
<td><strong>2003</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>31.0%</td>
<td>27.6%</td>
<td>29.4%</td>
<td>50.1%</td>
</tr>
<tr>
<td>Female</td>
<td>66.7%</td>
<td>71.3%</td>
<td>68.8%</td>
<td>48.6%</td>
</tr>
<tr>
<td><strong>2004</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>31.7%</td>
<td>29.1%</td>
<td>30.2%</td>
<td>52.1%</td>
</tr>
<tr>
<td>Female</td>
<td>66.3%</td>
<td>70.0%</td>
<td>68.8%</td>
<td>47.1%</td>
</tr>
<tr>
<td><strong>2005</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>32.5%</td>
<td>27.8%</td>
<td>30.3%</td>
<td>51.6%</td>
</tr>
<tr>
<td>Female</td>
<td>66.2%</td>
<td>71.5%</td>
<td>68.7%</td>
<td>48.1%</td>
</tr>
</tbody>
</table>

Figure 6: Male and female student participation in ACE and all VET (2001-2005)

The data shows that women are the main beneficiaries of vocational and non-vocational ACE programs. Men participate more in vocational ACE programs than in non-vocational ACE programs, and dominate in all VET.

ACE students by age group and program type

Table 6 shows the number of students of these age groups in vocational and non-vocational ACE programs. Shaded figures highlight the highest values for each group. Percentages in the brackets indicate the proportion against the total numbers for vocational, non-vocational, all ACE and all VET.
Table 6: ACE students by age group and program type (2001-2005)

<table>
<thead>
<tr>
<th>Age Group</th>
<th>Vocational ACE</th>
<th>Non-vocational ACE</th>
<th>All ACE</th>
<th>All VET</th>
</tr>
</thead>
<tbody>
<tr>
<td>2001</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Age 30-34</td>
<td>20,707 (8.7%)</td>
<td>23,185 (9.1%)</td>
<td>43,892  (9.2%)</td>
<td>166,475 (10%)</td>
</tr>
<tr>
<td>Age 35-39</td>
<td>22,721 (9.5%)</td>
<td>21,630 (8.4%)</td>
<td>44,351  (9.3%)</td>
<td>161,643 (9.6%)</td>
</tr>
<tr>
<td>Age 40-44</td>
<td>23,603 (9.9%)</td>
<td>21,915 (8.5%)</td>
<td>45,518  (9.2%)</td>
<td>153,548 (9.1%)</td>
</tr>
<tr>
<td>Age 45-49</td>
<td>20,613 (8.6%)</td>
<td>20,891 (8.1%)</td>
<td>41,504  (8.3%)</td>
<td>122,195 (7.3%)</td>
</tr>
<tr>
<td>All age groups</td>
<td>238,734</td>
<td>258,717</td>
<td>497,451</td>
<td>1,679,141</td>
</tr>
<tr>
<td>2002</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Age 30-34</td>
<td>18,945 (8.8%)</td>
<td>26,072 (9.8%)</td>
<td>45,017  (9.4%)</td>
<td>167,736 (10.1%)</td>
</tr>
<tr>
<td>Age 35-39</td>
<td>20,427 (9.5%)</td>
<td>23,182 (8.7%)</td>
<td>43,609  (9.1%)</td>
<td>157,306 (9.3%)</td>
</tr>
<tr>
<td>Age 40-44</td>
<td>21,855 (10.2%)</td>
<td>23,402 (8.8%)</td>
<td>45,257  (9.4%)</td>
<td>154,608 (9.2%)</td>
</tr>
<tr>
<td>Age 45-49</td>
<td>19,618 (9.1%)</td>
<td>22,832 (8.6%)</td>
<td>42,450  (8.9%)</td>
<td>124,759 (7.4%)</td>
</tr>
<tr>
<td>All age groups</td>
<td>214,430</td>
<td>266,475</td>
<td>480,905</td>
<td>1,682,946</td>
</tr>
<tr>
<td>2003</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Age 30-34</td>
<td>21,036 (8.6%)</td>
<td>20,800 (9.8%)</td>
<td>41,836  (9.2%)</td>
<td>170,872 (10.0%)</td>
</tr>
<tr>
<td>Age 35-39</td>
<td>21,402 (8.8%)</td>
<td>18,329 (8.7%)</td>
<td>39,731  (8.7%)</td>
<td>154,968 (9.0%)</td>
</tr>
<tr>
<td>Age 40-44</td>
<td>23,920 (9.8%)</td>
<td>19,134 (9.0%)</td>
<td>43,054  (9.4%)</td>
<td>156,591 (9.1%)</td>
</tr>
<tr>
<td>Age 45-49</td>
<td>22,392 (9.2%)</td>
<td>18,690 (8.8%)</td>
<td>41,082  (9.0%)</td>
<td>129,405 (7.5%)</td>
</tr>
<tr>
<td>All age groups</td>
<td>244,389</td>
<td>211,576</td>
<td>455,965</td>
<td>1,717,795</td>
</tr>
<tr>
<td>2004</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Age 30-34</td>
<td>14,563 (8.5%)</td>
<td>21,310 (9.9%)</td>
<td>35,873  (9.3%)</td>
<td>155,463 (9.7%)</td>
</tr>
<tr>
<td>Age 35-39</td>
<td>15,684 (9.1%)</td>
<td>18,154 (8.4%)</td>
<td>33,838  (8.7%)</td>
<td>141,457 (8.8%)</td>
</tr>
<tr>
<td>Age 40-44</td>
<td>17,891 (10.4%)</td>
<td>18,983 (8.8%)</td>
<td>36,874  (9.5%)</td>
<td>142,068 (8.9%)</td>
</tr>
<tr>
<td>Age 45-49</td>
<td>16,762 (9.8%)</td>
<td>18,874 (8.8%)</td>
<td>35,636  (9.2%)</td>
<td>119,838 (7.5%)</td>
</tr>
<tr>
<td>All age groups</td>
<td>171,472</td>
<td>215,389</td>
<td>386,861</td>
<td>1,595,232</td>
</tr>
<tr>
<td>2005</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Age 30-34</td>
<td>17,215 (8.6%)</td>
<td>16,968 (9.6%)</td>
<td>34,183  (9.1%)</td>
<td>154,468 (9.6%)</td>
</tr>
<tr>
<td>Age 35-39</td>
<td>17,954 (9.1%)</td>
<td>14,614 (8.3%)</td>
<td>32,568  (8.7%)</td>
<td>143,223 (8.7%)</td>
</tr>
<tr>
<td>Age 40-44</td>
<td>19,361 (9.7%)</td>
<td>15,019 (8.5%)</td>
<td>34,380  (9.3%)</td>
<td>142,209 (8.7%)</td>
</tr>
<tr>
<td>Age 45-49</td>
<td>19,258 (9.6%)</td>
<td>15,680 (8.9%)</td>
<td>34,938  (9.3%)</td>
<td>123,545 (7.5%)</td>
</tr>
<tr>
<td>All ages</td>
<td>199,842</td>
<td>176,607</td>
<td>376,449</td>
<td>1,641,254</td>
</tr>
</tbody>
</table>

Almost two thirds (65.4%) of ACE students were aged 30 years and over in 2005, with adults aged between 30 and 49 years continuing to dominate student numbers in ACE programs over the last five years. (Note: those aged 49 and over are not included in the table above). Of those students undertaking vocational ACE programs, 64.3% were aged 30 years and over, compared to 47.5% in all vocational courses in Australia.

Each of the age cohorts have maintained about 9% to 10% of the enrolments in vocational and non-vocational ACE programs and also in all VET. Of the four age groups in Table 6, the 30 to 34 year olds had the largest representation in all VET in Australia. Their numbers were also highest for non-vocational ACE activities, except for the year 2004 when a greater number of students aged 40 to 44 years were noted. The 40 to 44 year olds accounted for the largest number of students in the vocational ACE. Their numbers were highest for all
ACE activities except in year 2004 when the number of 45 to 49 year olds were the highest.

While the highest number of all VET participants were in the age range of 15 to 24 years and made up about 35% to 36% of the total students in each year, the 30 to 49 year age group made up similar numbers at 34% to 36%. A major difference in VET access by the younger and older participants in all VET is that the older age groups access more of the VET learning as vocational ACE.

The largest number of young people aged between 15 and 19 years participating in vocational programs delivered by ACE was recorded in 2001. Their numbers declined in years 2002, 2003 and 2004. In 2005, there was a slight increase to 14,759 students, with Victorian ACE providers accounting for 59.1% of young people participating in vocational programs delivered by ACE.

**ACE STUDENTS BY GEOGRAPHIC REGION AND PROGRAM TYPE**

Students from capital city locations made up the highest proportion in vocational and non-vocational ACE as well as in all VET activities. Students from rural areas were the next, followed by other metropolitan regions, and then those from remote areas (Table 7).

This pattern of participation was consistent over the last five years. Although students from capital cities made up the largest proportion of ACE participants, among the remaining groups it was students from other areas (rural, other metropolitan, remote) who took up more vocational ACE than non-vocational ACE. Students from rural areas made up the highest proportion who took on vocational ACE except in 2001 when remote students outnumbered them. Table 7 shows the students from each geographic region. The percentages show the proportion for all ACE and vocational ACE as a proportion of all VET.

Students from rural and remote areas are the most frequent users of vocational ACE programs (see Figure 7).

On the whole, students from rural areas made up the largest proportion of the student population in vocational ACE.

Students from the rural areas also made the largest proportion of the student population in all VET programs. The spread of students from the different geographic areas in all VET programs is illustrated in Figure 8.

Students from the capital city areas made up the next largest proportion, followed by those from other metropolitan areas. The proportion of students from remote areas participating in all VET was comparatively low.
### Table 7: ACE students by geographic region and program type (2001-2005)

<table>
<thead>
<tr>
<th></th>
<th>Vocational ACE</th>
<th>Non-vocational ACE</th>
<th>All ACE</th>
<th>All VET</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>2001</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Capital city</td>
<td>40.8%</td>
<td>59.2%</td>
<td>310,574</td>
<td>13.7%</td>
</tr>
<tr>
<td>Other metropolitan</td>
<td>57.6%</td>
<td>42.4%</td>
<td>27,085</td>
<td>12.9%</td>
</tr>
<tr>
<td>Rural</td>
<td>60.8%</td>
<td>39.2%</td>
<td>143,085</td>
<td>16.6%</td>
</tr>
<tr>
<td>Remote</td>
<td>68.2%</td>
<td>31.8%</td>
<td>4,313</td>
<td>4.5%</td>
</tr>
<tr>
<td>Total no. of students incl. overseas and unknown</td>
<td>238,734</td>
<td>258,717</td>
<td>497,451</td>
<td>1,679,141</td>
</tr>
<tr>
<td><strong>2002</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Capital city</td>
<td>37.2%</td>
<td>62.8%</td>
<td>296,764</td>
<td>12.0%</td>
</tr>
<tr>
<td>Other metropolitan</td>
<td>50.5%</td>
<td>49.5%</td>
<td>27,312</td>
<td>11.6%</td>
</tr>
<tr>
<td>Rural</td>
<td>58.8%</td>
<td>41.2%</td>
<td>141,489</td>
<td>15.6%</td>
</tr>
<tr>
<td>Remote</td>
<td>57.4%</td>
<td>42.6%</td>
<td>3,660</td>
<td>3.2%</td>
</tr>
<tr>
<td>Total</td>
<td>214,430</td>
<td>266,475</td>
<td>480,905</td>
<td>1,682,946</td>
</tr>
<tr>
<td><strong>2003</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Capital city</td>
<td>46.2%</td>
<td>53.8%</td>
<td>276,721</td>
<td>13.5%</td>
</tr>
<tr>
<td>Other metropolitan</td>
<td>58.6%</td>
<td>41.4%</td>
<td>24,100</td>
<td>11.5%</td>
</tr>
<tr>
<td>Rural</td>
<td>67.1%</td>
<td>32.9%</td>
<td>138,565</td>
<td>17.1%</td>
</tr>
<tr>
<td>Remote</td>
<td>62.8%</td>
<td>37.2%</td>
<td>3,340</td>
<td>3.4%</td>
</tr>
<tr>
<td>Total</td>
<td>244,389</td>
<td>211,576</td>
<td>455,965</td>
<td>1,717,795</td>
</tr>
<tr>
<td><strong>2004</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Capital city</td>
<td>36.3%</td>
<td>63.7%</td>
<td>242,759</td>
<td>10%</td>
</tr>
<tr>
<td>Other metropolitan</td>
<td>43.9%</td>
<td>56.1%</td>
<td>22,271</td>
<td>8.8%</td>
</tr>
<tr>
<td>Rural</td>
<td>62.9%</td>
<td>37.1%</td>
<td>110,447</td>
<td>13.7%</td>
</tr>
<tr>
<td>Remote</td>
<td>49.8%</td>
<td>50.2%</td>
<td>2,504</td>
<td>2.3%</td>
</tr>
<tr>
<td>Total</td>
<td>171,472</td>
<td>215,389</td>
<td>386,861</td>
<td>1,595,232</td>
</tr>
<tr>
<td><strong>2005</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Capital city</td>
<td>44.9%</td>
<td>55.1%</td>
<td>242,827</td>
<td>12%</td>
</tr>
<tr>
<td>Other metropolitan</td>
<td>56.2%</td>
<td>43.8%</td>
<td>20,930</td>
<td>10.1%</td>
</tr>
<tr>
<td>Rural</td>
<td>70.6%</td>
<td>29.4%</td>
<td>105,876</td>
<td>14.5%</td>
</tr>
<tr>
<td>Remote</td>
<td>55.4%</td>
<td>44.6%</td>
<td>2,727</td>
<td>2.5%</td>
</tr>
<tr>
<td>Total</td>
<td>199,842</td>
<td>176,607</td>
<td>376,449</td>
<td>1,641,254</td>
</tr>
</tbody>
</table>
Figure 7: Distribution of students from four regions in vocational and non-vocational ACE programs (2001-2005)

Figure 8: Spread of students from the different geographic areas in all VET programs (2001-2005)

ACE STUDENTS BY HIGHEST EDUCATION LEVEL COMPLETED AND PROGRAM

During 2001 and 2002, students with Year 10 qualifications made up the largest cohort of ACE programs (both vocational and non-vocational). Table 8 shows the figures for each qualification level completed by program type.
### Table 8: ACE students: highest level completed and program type (2001-2005)

<table>
<thead>
<tr>
<th></th>
<th>ACE</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Vocational</td>
<td>Non-vocational</td>
<td>Total</td>
<td>All VET</td>
</tr>
<tr>
<td><strong>2001</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bachelor degree or higher</td>
<td>9.8%</td>
<td>12.2%</td>
<td>10.8%</td>
<td>7.9%</td>
</tr>
<tr>
<td>Year 12</td>
<td>23.7%</td>
<td>19.7%</td>
<td>22.0%</td>
<td><strong>37.0%</strong></td>
</tr>
<tr>
<td>Year 11</td>
<td>10.6%</td>
<td>5.9%</td>
<td>8.6%</td>
<td>12.1%</td>
</tr>
<tr>
<td>Year 10</td>
<td><strong>32.0%</strong></td>
<td><strong>38.2%</strong></td>
<td><strong>34.7%</strong></td>
<td>28.1%</td>
</tr>
<tr>
<td>Miscellaneous education</td>
<td>14.1%</td>
<td>20.3%</td>
<td>16.7%</td>
<td>3.1%</td>
</tr>
<tr>
<td>Year 9 or lower</td>
<td>9.8%</td>
<td>3.7%</td>
<td>7.2%</td>
<td>9.9%</td>
</tr>
<tr>
<td><strong>Total student no.</strong>*</td>
<td>1</td>
<td>2002</td>
<td>1</td>
<td><strong>0.981</strong></td>
</tr>
<tr>
<td><strong>2002</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bachelor degree or higher</td>
<td>9.6%</td>
<td>11.8%</td>
<td>10.6%</td>
<td>8.5%</td>
</tr>
<tr>
<td>Year 12</td>
<td>26.5%</td>
<td>26.5%</td>
<td>26.5%</td>
<td><strong>36.9%</strong></td>
</tr>
<tr>
<td>Year 11</td>
<td>12.5%</td>
<td>6.9%</td>
<td>10.0%</td>
<td>14.3%</td>
</tr>
<tr>
<td>Year 10</td>
<td><strong>33.2%</strong></td>
<td><strong>40.2%</strong></td>
<td><strong>36.3%</strong></td>
<td>27.9%</td>
</tr>
<tr>
<td>Miscellaneous education</td>
<td>6.7%</td>
<td>10.5%</td>
<td>8.4%</td>
<td>1.9%</td>
</tr>
<tr>
<td>Year 9 or lower</td>
<td>11.5%</td>
<td>4.1%</td>
<td>8.2%</td>
<td>10.5%</td>
</tr>
<tr>
<td><strong>Total student no.</strong>*</td>
<td>1</td>
<td>6007</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td><strong>2003</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bachelor degree or higher</td>
<td>13.3%</td>
<td>18.3%</td>
<td>14.9%</td>
<td>8.6%</td>
</tr>
<tr>
<td>Year 12</td>
<td><strong>30.5%</strong></td>
<td><strong>36.1%</strong></td>
<td><strong>32.2%</strong></td>
<td><strong>38.1%</strong></td>
</tr>
<tr>
<td>Year 11</td>
<td>13.5%</td>
<td>9.4%</td>
<td>12.2%</td>
<td>14.2%</td>
</tr>
<tr>
<td>Year 10</td>
<td>22.3%</td>
<td>17.2%</td>
<td>20.7%</td>
<td>26.6%</td>
</tr>
<tr>
<td>Miscellaneous education</td>
<td>7.5%</td>
<td>12.8%</td>
<td>9.2%</td>
<td>1.6%</td>
</tr>
<tr>
<td>Year 9 or lower</td>
<td>13.2%</td>
<td>6.0%</td>
<td>10.9%</td>
<td>11.0%</td>
</tr>
<tr>
<td><strong>Total student no.</strong>*</td>
<td>1.003</td>
<td>14017.998</td>
<td>1.001</td>
<td>1.001</td>
</tr>
<tr>
<td><strong>2004</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bachelor degree or higher</td>
<td>13.0%</td>
<td>16.6%</td>
<td>14.4%</td>
<td>9.2%</td>
</tr>
<tr>
<td>Year 12</td>
<td><strong>31.4%</strong></td>
<td><strong>39.5%</strong></td>
<td><strong>34.6%</strong></td>
<td><strong>38.1%</strong></td>
</tr>
<tr>
<td>Year 11</td>
<td>14.5%</td>
<td>9.7%</td>
<td>12.7%</td>
<td>14.4%</td>
</tr>
<tr>
<td>Year 10</td>
<td>22.4%</td>
<td>17.9%</td>
<td>20.6%</td>
<td>25.7%</td>
</tr>
<tr>
<td>Miscellaneous education</td>
<td>4.4%</td>
<td>9.8%</td>
<td>6.5%</td>
<td>1.4%</td>
</tr>
<tr>
<td>Year 9 or lower</td>
<td>14.3%</td>
<td>6.4%</td>
<td>11.2%</td>
<td>11.2%</td>
</tr>
<tr>
<td><strong>Total student no.</strong>*</td>
<td>1</td>
<td>30040.995</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td><strong>2005</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bachelor degree or higher</td>
<td>14.8%</td>
<td>19.6%</td>
<td>16.2%</td>
<td>9.8%</td>
</tr>
<tr>
<td>Year 12</td>
<td><strong>32.5%</strong></td>
<td><strong>38.1%</strong></td>
<td><strong>34.3%</strong></td>
<td><strong>38.1%</strong></td>
</tr>
<tr>
<td>Year 11</td>
<td>13.0%</td>
<td>9.9%</td>
<td>12.1%</td>
<td>14.2%</td>
</tr>
<tr>
<td>Year 10</td>
<td>22.3%</td>
<td>18.3%</td>
<td>21.1%</td>
<td>25.3%</td>
</tr>
<tr>
<td>Miscellaneous education</td>
<td>3.6%</td>
<td>7.5%</td>
<td>4.8%</td>
<td>1.4%</td>
</tr>
<tr>
<td>Year 9 or lower</td>
<td>13.8%</td>
<td>6.7%</td>
<td>11.7%</td>
<td>11.4%</td>
</tr>
<tr>
<td><strong>Total student no.</strong>*</td>
<td>1</td>
<td>62087.991</td>
<td>1</td>
<td><strong>1.002</strong></td>
</tr>
</tbody>
</table>

* The total figures include Bachelor degree or higher degree level; Advanced diploma or associate degree; Diploma; Certificate IV; Certificate III; Year 12; Year 11; Certificate II; Year 10; Certificate I; Miscellaneous education; Year 9 or lower.
This pattern changed from 2003 when students with Year 12 qualifications made up the highest numbers in ACE programs. The number of students with a Bachelor degree or higher degree qualification increased in ACE programs, particularly in non-vocational programs. Comparing all six groups, those with a Year 9 qualification made up the lowest numbers in non-vocational ACE over the five years.

In vocational ACE, those with a Year 12 qualification made up the highest numbers followed by those with Year 10, then Year 11, Year 9, Bachelor degree or higher degree, and lastly by those whose miscellaneous education who met the entry requirements.

In all VET programs, those with a Year 12 qualification made up the highest numbers followed by those with Year 10, then Year 11, Year 9, Bachelor degree or higher degree, and lastly by those whose miscellaneous education who met the entry requirements. This pattern was consistent throughout the five year period. Participation in all VET by students with a Bachelor degree or higher degree qualification declined during 2003 and 2004, but a large increase in vocational ACE and all VET was recorded in 2005.

**ACE ANNUAL HOURS BY DELIVERY TYPE AND PROGRAM TYPE**

Campus based delivery, particularly in vocational ACE programs, was most popular with students in all program types over the last five years. Considering the three known delivery types (campus based, remote access and employment based), remote access was least popular for vocational and non-vocational ACE as well as for all VET. This implies that ACE students prefer campus based or face-to-face interactions to other modes of delivery.

**Annual hours by field of study**

*Subject only – no field of education* maintained the highest number of annual hours in all ACE programs over the last five years. The top three fields of study in the ACE sector (based on the proportion of annual hours in a particular field) since 2002 were Mixed Field Programmes, Society and Culture, and Management and Commerce (see Table 9). These fields also accounted for the most annual hours in vocational ACE programs. The highest numbers of annual hours recorded in all VET programs were in Engineering and Related Technologies, Management and Commerce, and Society and Culture.

Enrolment hours in *Subject only – no field of education* was highest (totally 81.7%) in non-vocational ACE during 2005.
Table 9: Percentage of annual hours by field of study, vocational, non-vocational and all ACE (2002 – 2005)

<table>
<thead>
<tr>
<th>Field of study</th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Vocational</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Management and Commerce</td>
<td>16.8</td>
<td>14.1</td>
<td>15.6</td>
<td>16.2</td>
</tr>
<tr>
<td>Society and Culture</td>
<td>18.6</td>
<td>24.8</td>
<td>20.5</td>
<td>20.2</td>
</tr>
<tr>
<td>Mixed Field Programmes</td>
<td>17.4</td>
<td>19.5</td>
<td>23.0</td>
<td>20.3</td>
</tr>
<tr>
<td>Subject only - no field of education</td>
<td>29.3</td>
<td>24.8</td>
<td>24.1</td>
<td>24.7</td>
</tr>
<tr>
<td><strong>Non-vocational</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Management and Commerce</td>
<td>7.3</td>
<td>2.1</td>
<td>10.8</td>
<td>1.2</td>
</tr>
<tr>
<td>Society and Culture</td>
<td>17.3</td>
<td>8.3</td>
<td>14.2</td>
<td>1.0</td>
</tr>
<tr>
<td>Mixed Field Programmes</td>
<td>2.9</td>
<td>15.3</td>
<td>8.2</td>
<td>2.6</td>
</tr>
<tr>
<td>Subject only - no field of education</td>
<td>36.2</td>
<td>33.5</td>
<td>39.3</td>
<td>81.7</td>
</tr>
<tr>
<td><strong>All ACE</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Management and Commerce</td>
<td>12.4</td>
<td>11.1</td>
<td>12.5</td>
<td>13.3</td>
</tr>
<tr>
<td>Society and Culture</td>
<td>18.2</td>
<td>20.7</td>
<td>18.8</td>
<td>16.5</td>
</tr>
<tr>
<td>Mixed Field Programmes</td>
<td>12.9</td>
<td>18.4</td>
<td>18.9</td>
<td>16.8</td>
</tr>
<tr>
<td>Subject only - no field of education</td>
<td>31.4</td>
<td>26.9</td>
<td>28.2</td>
<td>35.4</td>
</tr>
</tbody>
</table>

Note: 2001 data was not included because data for the above four fields were collected since 2002.

Annual hours by qualification level and program type

Table 10 illustrates the spread of annual hours in each program type in the top three known qualifications.

The annual hours for vocational ACE programs led largely to *Subject only - no qualification*. The number of annual hours for Certificate II and III qualifications were the second and third highest respectively during 2001 to 2003. This changed in 2004 and 2005 when the total annual hours recorded for these qualifications was higher for Certificate III than for Certificate II.

The annual hours for non-vocational ACE programs eventuated mainly as *non award courses*, *Subject only - no qualification* and *Statement of attainment* during 2001 to 2003. This changed in 2004 when high annual hours were recorded for *Subject only - no qualification*, *non award courses* and *Statement of attainment*. Another change was noted in 2005 when high annual hours were seen in *Subject only – no qualification, Year 12*, and *non award courses*. These changes influenced the total annual hours for all ACE programs.

During 2001 and 2002, the top three known qualifications that had the highest annual hours for all VET were Certificate III, Certificate II and Diploma respectively. In 2003, it was Certificate III, IV and II respectively. In 2004 and 2005, highest annual hours were recorded against Certificate III, IV and Diploma respectively. The highest number of annual hours was noted at the Certificate III in all VET over the five year period.
Table 10: Spread of annual hours in each program type in the top three known qualifications (2001 to 2005)

<table>
<thead>
<tr>
<th>Year</th>
<th>Vocational ACE</th>
<th>Non-vocational ACE</th>
<th>All ACE</th>
<th>All VET</th>
</tr>
</thead>
<tbody>
<tr>
<td>2001</td>
<td>Subject only – no qualification (26.7%)</td>
<td>Non award courses (56.8%)</td>
<td>Subject only – no qualification (30.4%)</td>
<td>Cert. III (27.2%)</td>
</tr>
<tr>
<td></td>
<td>Cert. II (21.6%)</td>
<td>Subject only – no qualification (39.1%)</td>
<td>Non award courses (24.4%)</td>
<td>Cert. II (18.4%)</td>
</tr>
<tr>
<td></td>
<td>Cert. III (14.7%)</td>
<td>Statement of attainment (8.4%)</td>
<td>Cert. II (15.1%)</td>
<td>Diploma (15.4%)</td>
</tr>
</tbody>
</table>

| 2002 | Subject only – no qualification (29.3%) | Non award courses (39.5%) | Subject only – no qualification (31.4%) | Cert. III (27.6%) |
|      | Cert. II (19.9%) | Subject only – no qualification (36.2%) | Non award courses (18.2%) | Cert. II (17.1%) |
|      | Cert. III (15.7%) | Statement of attainment (1.7%) | Cert. II (13.7%) | Diploma (15.5%) |

| 2003 | Subject only – no qualification (24.8%) | Non award courses (37.9%) | Subject only – no qualification (26.9%) | Cert. III (29.6%) |
|      | Cert. II (16.6%) | Subject only – no qualification (33.5%) | Cert. II (12.5%) | Cert. IV (15.4%) |
|      | Cert. III (15.8%) | Statement of attainment (0.8%) | Cert. III (11.9%) | Cert. II (15.1%) |

| 2004 | Subject only – no qualification (24.1%) | Subject only – no qualification (39.3%) | Subject only – no qualification (28.2%) | Cert. III (31.1%) |
|      | Cert. III (21.4%) | Non award courses (31.3%) | Cert. III (15.5%) | Cert. IV (15.7%) |
|      | Cert. II (17.6%) | Statement of attainment (1.4%) | Non award courses (13.1%) | Diploma (15.1%) |

| 2005 | Subject only – no qualification (24.3%) | Subject only – no qualification (81.7%) | Subject only – no qualification (35.4%) | Cert. III (31.9%) |
|      | Cert. III (23.7%) | Year 12 (0.5%) | Cert. III (19.1%) | Cert. IV (15.0%) |
|      | Cert. II (18.4%) | Non award courses (0.03%) | Cert. II (14.8%) | Diploma (14.8%) |

Subject enrolments by subject outcome and program type

Of the total subject enrolments in vocational ACE, over 80% recorded either achieved or gained a pass or satisfactorily completed record between 2001 and 2005 (see Table 11). In non-vocational ACE, the pass/satisfactory completion rate was well over 90%, with over 98% between 2002 and 2005. The pass/satisfactory completion rates of subject enrolments in all ACE were well above the rates for all VET (of between 71% and 74.8%) over the five year period.

Table 11: Percentage of ACE subject enrolments with an achieved or pass or satisfactorily completed by program type

<table>
<thead>
<tr>
<th>Year</th>
<th>Vocational</th>
<th>Non-vocational</th>
<th>All VET</th>
</tr>
</thead>
<tbody>
<tr>
<td>2001</td>
<td>Achieved/pass or satisfactorily completed</td>
<td>86.5%</td>
<td>90.0%</td>
</tr>
<tr>
<td>2002</td>
<td>Achieved/pass or satisfactorily completed</td>
<td>84.9%</td>
<td>98.4%</td>
</tr>
<tr>
<td>2003</td>
<td>Achieved/pass or satisfactorily completed</td>
<td>85.3%</td>
<td>99.1%</td>
</tr>
<tr>
<td>2004</td>
<td>Achieved/pass or satisfactorily completed</td>
<td>82.5%</td>
<td>98.6%</td>
</tr>
<tr>
<td>2005</td>
<td>Achieved/pass or satisfactorily completed</td>
<td>80.0%</td>
<td>98.2%</td>
</tr>
</tbody>
</table>
ACE AND VET

The quality of VET by the ACE sector is comparable to that provided by other registered training organisations. ACE is locally focused, flexible, responsive and community-based, aspects which appeal to its participants. The sector also links well with local and regional networks. Many ACE providers become training and learning brokers for individuals and the community. Jones (1998, pp. 5-6) attributed the success of ACE to the following factors:

- A powerful relationship between government and the community
- Promotion of cultural diversity
- Education that is affordable, cost effective, of high quality, and broad and deep
- Use of technology to reach rural areas
- Addition of value to the community by promoting purpose and belonging.

Saunders (2001, pp. 3-4) identified four features that distinguish ACE VET from mainstream VET:

- **Flexibility of provision** – the ability to cater for the needs of students who find it difficult to fit in study with other commitments (such as timetabling and location of venue).
- **Course content and delivery matches student and enterprise needs** – because ACE is closely associated with local communities, businesses and students, it is in closer touch with vocational needs than mainstream VET organisations. In ACE, the trainer often deals directly with the workplace, determining requirements, designing the training program and teaching it – helping to ensure the training accurately matches workplace requirements.
- **Friendly, supportive, non-bureaucratic learning environment** – praise for the informal friendly and supportive nature of ACE, less intimidating than most mainstream VET organisations. People feel more comfortable with ACE, particularly those who are apprehensive about study or need ongoing reassurance and support.
- **Nature and quality of the courses** – care in which ACE courses are designed, the easy-going style of presentation, and the focused nature of the course content (short, sharp, snappy, punchy are words commonly used to describe ACE vocational courses).

Despite the above enabling and supportive features, the span of ACE and VET policies can be seen as a continuum such as shown in Figure 9. There is some distance between ACE and VET within a fragmented and specialised market for learning. However, past the obvious differences in pedagogy and processes, to the principles and purpose underpinning both sectors – the provision of quality learning and training appropriate for adults, whether employed, unemployed, volunteering or retired – the differences and specialisation seem less divisive.
The failure to appreciate the social, economic and educational value of the links between community-based (with social outcomes) and workplace-based (with vocational outcomes) learning, at best, means these links will not be fully capitalised to achieve current government policy outcomes under the NRA.

At worst, some ACE participants who do not fit within current priorities, but who would otherwise make valuable contributions to their communities and the nation may be totally excluded. Incoherent policies eclipse ACE’s strengths in developing the human capital at a higher level. ACE participants who benefit from disjointed policies on training hold the potential to contribute to the skills shortage. Their untapped potential needs to be harnessed to narrow the skills gap currently being faced by industries across Australia.

IMPROVING SKILLING THROUGH ACE

Responding to the current skills deficit requires greater efficiencies in training for employment. ACE can make a greater contribution to the skilling process. At a glance, ACE is already excelling at serving the young and old members of the general community; men and women; over-committed women who had put learning on hold; the poor as well as affluent; those seeking work skills and work qualifications and those interested in hobbies; employed, unemployed and retired people; people from all linguistic and cultural backgrounds; those with intellectual and/or physical disabilities; people who have primary education only and those with tertiary qualifications; people all geographic areas; and those who pay for their courses as well as those who do not (Clemans et al. 2003).

ACE programs and services include foundation education, including language, literacy and numeracy; English as a second language; personal development; specific vocational education programs (including traineeships, industry training and employment services); general citizenship; and volunteer training. ACE offers a mix of accredited and non-accredited programs; non-accredited programs only; and accredited programs only. What ACE is good at is “having a feel” for community needs; reading and understanding community demographics; monitoring demands; consultations with staff, committee members and students; and responding to state and territory policy and funding initiatives.
ACE is already playing an active role in engaging and building communities by developing and strengthening networks, building community resources, and participating in community development projects. Current programs of this sector are already leading to employment outcomes and improved pathways for further learning (see Appendix C for some examples).

Several writers (e.g. Clemans et al. 2003; Saunders, 2001; Borthwick et al. 2001; Bottomley, 1998; Jones, 1998) have suggested strategies that would improve ACE’s performance and/or recognition of this performance. There is no doubt that substantial additional funds could boost provisions by the ACE sector. Funding remains an issue for any training sector. How could ACE be more active in developing the human capital and skilling Australians? They can expand two areas of their current provisions: training for employment outcomes; and training for improved pathways. Strategies suggested in the literature reviewed for this report were considered for the two areas. To facilitate the strategies, some re-positioning of ACE providers categorised into the four tiers (see Table 1) could be considered.

Providers in Tier 1 and 2 could be grouped as large providers. They would already have existing resources, structures and a client base. Additional funds for professional development of staff would facilitate quality delivery that meets the AQTF Standard 7. In this way, they could increase delivery of accredited VET, thereby adding to the number of skilled workers.

Providers in this group (large providers) could choose to operate on a competitive basis. They could also approach their business through collaboration and partnerships with other ACE and local VET providers, thereby optimising local resources for provisions to meet the local community needs. This first group of providers could also continue with the provision of non-vocational adult and community education to accommodate their traditional client base.

ACE providers in Tier 3 and 4 could be grouped as medium/small size providers. Some would already have existing resources and others would need funding and assistance to meet the full requirements for RTO status in order to fulfil the AQTF Standards. This re-organisation could be initiated and facilitated through the AQFAB review to reduce regulatory requirements. More funds and support for professional development of staff would facilitate quality delivery that meets the AQTF Standards.

This second group of ACE providers (medium/small) could concentrate more on the provision of non-vocational programs to create pathways into further training by large ACE providers and by other VET providers, and into employment. They could approach their business through collaboration and partnership with large ACE providers and local VET providers. It would certainly be in their interest to collaborate and form partnerships with other providers to optimise local resources for provisions to meet the local community needs. Of course, in areas where they are the sole providers of VET (e.g. in rural and remote regions), they could continue this aspect of business.

In a highly competitive environment, partnerships are critical for both groups. Four levels of partnership could be considered: networking, coordinating, cooperating and collaborating (Himmelman, 2001).
Within a complex and competing environment, how could ACE continue to operate? Some strategies for training for employment outcomes; and training for improved pathways are now discussed.

**TRAINING FOR EMPLOYMENT OUTCOMES**

ACE could play a more active role in training for employment by offering VET programs targeted for specific employment outcomes to meet the skills needs in the local community or industry area. They use their existing structures and resources or achieve these outcomes through improved partnership arrangements with other local providers, industry and other networks. Two distinct roles could be considered – as a training provider; or as a broker.

A cursory look at vocational and non-vocational ACE programs shows that the sector contributes to the upskilling and reskilling of Australia’s workforce in a number of industries – building and construction; business, community and health services; primary and rural; and tourism and hospitality. To a lesser extent, some training is offered in automotive, aviation, energy, food processing, marine and mining. In some instances, such as in mining, training appears to be of a specialised nature. There was no training that clearly related to the biotechnology industry.

The industries where most ACE activities occur are the areas that historically have been the focus for this sector. Computers and information technology (IT) however have represented a growth area.

The ACE sector’s stronghold can be capitalised further to target training that meets the immediate as well as long term skill needs at the local level. To do this, the following list of provisions suggested by Saunders (2002, p. 8-10) could be considered:

- Local community focus in determining vocational needs of individuals and businesses.
- Vocational learning for people affected by industry change - these people include young and older people.
- Package-based training.
- ‘Segmented’ training - that is, short, sharp, focused courses.
- Training via the Internet - particularly to regional students.
- Training in management, office and interpersonal skills, such as business management, basic accounting, communication, computer packages (office and small business), report writing, supervision, conflict resolution and networking.
- Training in information technology – the abilities of ACE to employ trainers from industry with the latest knowledge and skills and to provide short, focused courses were seen as assets in providing training for this rapidly changing industry sector.
- Vocational training for special groups such as people with low language or literacy skills, people with low levels of schooling, women seeking to re-enter the workforce, Indigenous groups, people with disabilities, and job-seekers.
• Trainer training to industry - especially in remote areas.
• Training partnerships with enterprises to assist with workplace training.
• Supervision, mentoring or tutoring in association with mainstream VET providers in regions not able to be adequately serviced by mainstream VET.

Where existing resources could accommodate more training places, ACE providers could increase their intake focusing on vocational outcomes. Government authorities could assist to ease the bureaucracies that form barriers.

Partnerships with the local VET providers may be a theoretically sound option. However, there are problems with this arrangement. For instance, weak linkages between vocational ACE and mainstream VET prevent learners from gaining maximum credits for VET completed in the ACE sector. Research shows that some ACE participants are unaware of potential linkages. Linkages between vocational ACE and mainstream VET can be strengthened by:

• providing linkage assistance to students
• improving communication, cooperation and collaboration between the two sectors
• improving promulgation of ACE VET information
• appointing coordinators to act between ACE and mainstream VET
• utilising ACE as a regional training broker or coordinator
• developing an effective system for cross-sector referral
• sharing resources between ACE and mainstream VET (Saunders, 2001, pp. 5-8).

The above strategies rely heavily on relationships between personnel from ACE and VET institutions, and the level and effectiveness of communication. The nature of such relationships is critical to the development of human and social capital at the local level. Historical and cultural dimensions may impact on such relationships. An independent facilitator or the State Training Authority could broker improved relationships. Interactions between the ACE and VET providers can be improved through:

• increased information sharing between ACE and mainstream VET
• development of strategic alliances between ACE and mainstream VET
• establishment of learning pathways by continued negotiation
• better sharing and allocation of responsibilities for provision of related courses
• joint provision of courses
• shared use of resources such as premises, teachers and equipment
• development of a clearly identifiable national ACE VET structure (to complement that of mainstream VET), including better identification and coordination of current ACE VET provision at local, regional and State levels
• cross representation on ACE and mainstream VET management bodies (Saunders, 2001, pp. 5-8).
Each of the strategies above needs to be considered in the context of the individual communities and capacities of ACE providers. Relevant strategies must be explored in depth to develop action plans, and identify key agents and their roles to achieve the outcomes for the NRA or for reducing the skills deficit.

**TRAINING FOR IMPROVED PATHWAYS**

ACE is widely recognised for its role in developing personal and social skills and ‘generic’ skills (Sanguinetti et al., 2004). Kearns (2001) describes generic skills as “life and employability skills and attributes”. He regarded life and employability skills as inseparable. Their development is underpinned by personal attributes. Kearns (2001) presented a framework that illustrates the connections between the five skills clusters and common ACE pedagogies that support their development (Figure 10).

**Figure 10: Clusters of key generic skills (from Sanguinetti et al. (2004)).**

![Diagram showing clusters of key generic skills]

- The Interpersonal (or social) Clusters with underpinning personal attributes and values
  - eg emotional intelligence
  - self-understanding
- The Cognitive Clusters with underpinning personal attributes
  - eg willingness to learn
  - positive attitude to change
  - complexity mastery of mental models


The provision of employability or soft skills, which are receiving much current attention, has traditionally been popular with participants in the ACE sector. Sanguinetti et al. (2004) agree that “… the development of ‘autonomy’, ‘self-mastery’, and ‘self-direction’ underpins the development of all other skills. Likewise, the development of ‘interpersonal skills’ will feed into ‘work readiness and work habits’; ‘enterprise’, entrepreneurship, creativity and innovation’, and ‘learning, thinking and adaptability skills’ and so forth” (p. 70). They argue that all five skills clusters identified by Kearns can be facilitated by ACE pedagogies. These arguments support the multidimensional pedagogies of ACE. The non-
threatening and supportive environment is well suited for the development of generic skills when compared to the single dimensional instructional methods common in the competency based framework.

ACE is well placed to provide generic skills and pre-training and to improve pathways into VET programs or further training or learning. It is well recognised for the following roles:

- Flexibility in course structure, timetabling, delivery format, class size and venue to better satisfy industry and individual needs.
- Encouragement and assist people to commence or return to vocational study - particularly people intimidated by mainstream vocational training organisations and the prospect of 'formal' study.
- Provision of customised training to meet the needs of individuals and organisations
- Provision of entry-level training and job seeking skills to enable individuals to gain entry-level qualifications in an industry, develop job-seeking skills, develop Mayer key competencies and, where necessary, improve language and literacy skills.
- Provision of individualised learning for Centrelink clients
- Use of its expertise as an education broker or coordinator to act on behalf of the many skilled vocational training personnel who, having taken retirement packages, seek to work on a casual or part-time basis but lack resources or skills to market their services (Saunders, 2001, p. 8-10).

ACE is renowned for both vocational and non-vocational provisions with capacities for VET (competency based) as well as multidimensional pedagogies. Most providers of the sector already have the basic prerequisites to enhance their contribution to the development of human capital and the skilling of Australian workers through the two possible approaches suggested in this report: training for employment outcomes; and training for improved pathways.

Greater input from ACE in training for employment outcomes; and training for improved pathways to achieve the NRA and reducing the skills deficit in Australia requires reforms in current policies. Any reforms in policy directions involving ACE should maintain its strengths and services to current client groups who are not yet ready to engage in learning through other sectors, and who prefer ACE to other providers. Provision of non-accredited and certificated courses should remain. Funding for self development type of courses should also remain. At any cost, reforms in ACE should not turn away the very people it was first set up to serve.

SUMMARY

Over the last five years, about 12.8% of VET was delivered by ACE providers. Just over half the ACE students engaged in non-vocational programs. However, subject enrolments in vocational programs delivered by ACE as a proportion of all ACE activities have been higher than subject enrolments for non-vocational programs. As a proportion of all VET programs, subject enrolments in vocational ACE programs, on average was about 4.5%. Similarly, annual hours recorded in vocational ACE were higher (almost two thirds) than in non-vocational programs.
Annual hours in vocational ACE, as a proportion of all VET programs, remained at about 4%.

The data shows that non-vocational ACE programs were more popular with women who made up about two thirds of the ACE student population. There were more men in mainstream VET.

Although students from capital cities made up the largest proportion of ACE participants, among the remaining groups it was students from other areas (rural, other metropolitan, remote) who took up more vocational ACE than non-vocational ACE. Campus based delivery by ACE, particularly in vocational programs, was most popular with students in all program types over the last five years. This implies that ACE students prefer campus based or face-to-face interactions to other modes of delivery.

In the last three years, those with a Year 12 qualification made up the highest number of students in ACE programs, while their numbers remained the highest for all VET. An increase in the number of students with a Bachelor degree or higher degree qualification was noted for ACE programs, particularly in non-vocational programs.

Mixed Field Programmes, Society and Culture, and Management and Commerce remained the top three fields of study in the ACE sector. In the VET sector they were Engineering and Related Technologies, Management and Commerce, and Society and Culture.

Qualifications resulting from vocational ACE programs were mainly *Subject only – no qualification, Certificate II and Certificate III*. For non-vocational programs delivered by ACE, *Subject only - no qualification, non award courses and Statement of attainment* were common until 2005 when *Subject only – no qualification, Year 12, and non award courses* were higher.

Pass rate and satisfactory completion in both vocational and non-vocational ACE were high, particularly in non-vocational ACE. The pass/satisfactory completion rates of subject enrolments in ACE were well above the rates for all VET.

The meta-analysis for this project highlights that ACE is already making a noteworthy contribution to human and social capital and that this sector is well placed to enhance its activities to achieve the outcomes of the NRA. To facilitate this, there is a need for reforms to the ACE sector to re-position some roles and functions, and re-align the funding arrangements. High levels of funding could furnish many promises and deliver significant outcomes in terms of developing skilled workers. However, such funds are not readily available, are pooled in competitive rounds, and are often allocated for specific purposes. In any case, reforms to ACE need to take into account current barriers and limitations.

Large ACE providers with RTO status, supported by public funds, already have existing resources, structures and a client base. Additional funds for professional development of staff would facilitate quality delivery that meets the AQTF Standards. In this way, they could increase delivery of accredited VET, thereby adding to the number of skilled workers. They could choose to operate on a competitive basis or approach their business through collaboration and partnerships with other ACE and local VET providers. Large ACE providers could
also continue with the provision of non-vocational adult and community education to accommodate their traditional client base.

Medium and small size ACE providers could be assisted to meet the full requirements for RTO status to fulfil the AQTF Standards. More funds and support for professional development of staff would facilitate quality delivery that meets the AQTF Standards. The medium and small size ACE providers could concentrate more on the provision of non-vocational programs to create pathways into further training by large ACE providers and by other VET providers, and into employment. They could approach their business through collaboration and partnership with large ACE providers and local VET providers. It would certainly be in their interest to collaborate and form partnerships with other providers to optimise local resources for provisions to meet the local community needs. Of course, in areas where they are the sole providers of VET, such as in rural and remote regions, they should continue this aspect of business.

In a highly competitive environment, partnerships are critical for all ACE providers. Four levels of partnership could be considered: networking, coordinating, cooperating and collaborating (Himmelman, 2001).

The review of research for this report has identified a range of strategies that could improve ACE’s contributions to skilling the Australian workforce. ACE providers could continue offering VET programs targeted for specific employment outcomes to meet the skills needs in the local community and/or industry area is one approach. ACE providers could take on the role of a training provider or as a broker.

Research shows that weak linkages between ACE VET and mainstream VET prevent learners from gaining maximum credits for VET completed in the ACE sector. These linkages need to be strengthened. Relationships between ACE and VET need to be enhanced through better interactions. ACE is well placed to provide pre-training and to improve pathways into VET programs or further training or learning. ACE is widely recognised for its role in developing personal and social skills and ‘generic’ skills which relate to ‘life and employability skills and attributes’. Sanguinetti et al. (2004, p. 70) assert that the development of ‘autonomy’, ‘self-mastery’ and ‘self-direction’ are important because they underpin the development of all other skills. The development of ‘interpersonal skills’ that support ‘work readiness and work habits’, ‘enterprise’, ‘entrepreneurship, creativity and innovation’, and ‘learning, thinking and adaptability skills’ can be facilitated by ACE providers.

The strategies suggested in this report need to be explored by government authorities and ACE providers to implement changes that will enhance the sector’s contribution to the National Reform Agenda and the development of human and social capital.
RECOMMENDATIONS

The authors recommend actions in five areas:

• More supplementary and qualitative data using methodologies such as Most Significant Change and Appreciative Inquiry is collected to gain a better understanding of ACE contributions other than that recorded against activities and outcomes from government funds.

• A discussion paper is developed for further dialogue and consultation with ACE stakeholders and user groups to refine strategies and actions to improve the skilling of Australians through ACE.

• The strategies are analysed in the context of current policies on ACE and VET in Australia. Change agents and their responsibilities are identified to implement suggested strategies and actions.

• Case studies of effective partnerships between ACE and other VET providers are collated as examples to draw frameworks for other interested providers.

• Reforms to the ACE sector are considered to achieve outcomes against the human capital development goal in the National Reform Agenda.
REFERENCES


ACE’s role in developing Australia’s human capital


APPENDIX A: SKILLS SHORTAGES BY INDUSTRY

An industry by industry analysis of skills shortages and gaps based on Industry Skills Council’s reports and information follows:

**Agri-Food Industry**¹

- Rural and regional areas are facing a critical shortage of skilled and semi-skilled workers, especially in agriculture, horticulture, meat, food processing and racing.
- Difficulty in attracting and retaining people, especially young people, because of location, poor working conditions, uncompetitive rewards, and lack of a career path.
- Difficulty in finding the right people with the right skills to sustain and grow businesses.
- Need for reskilling and upskilling farmers to bridge skill gaps including on farm training in language, literacy and numeracy, new farming methods and technologies, training in finance and business management, new management skills and office practices.
- In *production horticulture* there are specialised skill shortages, including high-level orchard management, knowledge of industry practices, plantation skills, banana industry, seasonal labour skills for packing sheds.
- In *viticulture* there are skill needs for middle management, including overseers, supervisors and vineyard managers, reflecting the rapid development of the industry over the last decade.
- There has also been strong growth increase in *cotton production* and this growth has increased skill demands, with agronomists noted as an area of shortage.
- New farming methods and technologies, particularly in the *wool industry*, have also contributed to skill shortages, including for shearers, shed hands skilled stock and farm hands.

**Community Services and Health**²

- Acute shortages of registered and enrolled nurses, medical professionals and some allied health workers.
- Shortages of child care, residential aged care and mental health workers.

**Construction and Property Services**³

- Significant shortages in real estate property managers and sales people.
- Increased demand for Australian intelligence in the spatial information services industry.
- Skills training in new technology for the existing workforce in building, design and architecture.
- Security has an increasing need for higher levels of technical competence in emerging areas such as biometrics.
- Construction has a shortage of on-site workers and requires extensive training of the present workforce in project management, new technologies like robotics, and the more extensive use of computer skills.

¹ [www.agrifoods.net.au](http://www.agrifoods.net.au)
Electrotechnology and Energy Utilities

- Severe skills shortages of skilled tradespersons, particularly in areas incorporating advanced 'smart' technologies as in the areas of voice and data communications.
- More skilled workers to replace outdated and increasingly overloaded infrastructure.
- Greater emphasis on multi-skilling and less need for narrow technical skills.
- Common utilities workers for new suburban subdivisions where a common trench will combine electricity, gas, and communications including fibre optics.
- Due to the dangerous nature of working with electricity and gas, training to ensure adherence with regulatory requirements.

Government and Community Safety

- Upskilling existing local council workers to improve operational performance.
- Skills shortages in traditional trades and key professional occupations for local councils.
- Overall shortage of technical skills in the water industry.
- Capability gaps in water management.
- Skill shortages caused by the growing complexity of work in the correctional services.

Innovation and Business

- Not available at the time of search (24 May, 2006)

Manufacturing

- Engineering shortages at the higher trade levels of electronic engineering and welding skills, tool making, in computer-aided design (CAD) and machining, and in the use of computer numerically controlled (CNC) processes.

Resources and Infrastructure

- There is a general shortage of skilled workers and tradespeople.

Service Industry

- Traditional pools of quality labour are drying up.
- Managers want staff with deeper cognitive capacities and behavioural savvy.

Transport and Logistics

- Skills for new industry technology and the acquisition of core information and communication technology skills eg vehicle and component specialist technologies based on computerisation and electronics.

8. www.gsaisc.net.au
7. www.ibtu.org.au
5. www.riisc.com.au
4. www.serviceskills.com.au
3. www.tdtaustralia.com
• The integration of skills across the transport and distribution sectors to support the effective operation of logistics and supply chain management, particularly in those occupations which depend on and contribute to systems integration.

• Skills to meet new regulatory requirements, particularly in areas of public safety and the environment.

• Customer service and relationship management skills.

• Management skills at all levels, but particularly those associated with change management.
APPENDIX B: AN OVERVIEW OF ACE IN EACH STATE AND TERRITORY

New South Wales: The Board of Adult and Community Education Act 1990 called for the establishment of a 13-person Board to promote the provision of adult and community education in New South Wales, allocate government funds to ACE providers and advise the Minister of needs and trends in adult and community education. The Board advises the Minister for Education and Training on the allocation of grants to 63 community-owned and managed organisations in metropolitan, regional and rural NSW, including specific purpose grants.

Community Colleges NSW is a not-for-profit association formed in 1991 for the advancement of adult and community education in NSW. Membership includes the Evening and Community Colleges Association, The Workers Educational Association (NSW) and The Community Adult Education Centres Association of NSW. In 2000, the three associations took a decision to amalgamate and be represented by one peak body that provides a network for its members, connecting them to state-wide contacts and initiatives. There are currently 59 Community Colleges across the State of NSW who are providers of adult and community education and who are members of Community Colleges NSW.

According to the New South Wales Board of Adult and Community Education (NSW BACE, 2004), ACE has experienced significant growth in this State. In 2004, over 340,000 enrolments and more than six million student contact hours were delivered by community colleges in New South Wales.

Victoria: The Adult Community and Further Education Board (ACFEB) in Victoria claims that Victoria has the most established ACE sector in Australia. The Board’s (2001) strategic document, ACE into the 21st Century: A Vision contains numerous directions to enhance ACE across the State. The ACE sector has thrived on a partnership between government and the community since 1960 and was formalised in the Adult Community and Further Education Act 1991. The ACFE Board and ACFE Regional Councils were established under the Act in 1992. The success of ACE in Victoria is attributed to the powerful relationship between government and the community; the promotion of cultural diversity; the provision of education that is affordable, cost effective, of high quality, and broad and deep; using technology to reach rural areas; and adding value to the community by promoting purpose and belonging (Jones, 1998).

There are currently over 500 community owned and managed adult education providers that operate as Adult and Community Education Centres, Neighbourhood Houses, Community Centres and other ACE organisations (ACFEB, 2001). ACE provisions are as follows:

- The Adult Literacy and Numeracy program, incorporating English as a Second Language (ESL), which provides literacy, numeracy and basic education courses for learners beginning their return to education, those seeking entry to other forms of education and training, and those with a language background other than English who are seeking to improve their English language skills.
- Vocational education programs which provide learners with specific skills either to enter or return to the workforce or work in particular industries and occupations.
- Employment skills programs aimed at giving learners essential skills to enter or perform more effectively in the workforce generally.
- The Victorian Certificate of Education (VCE) and the Victorian Certificate of Applied Learning (VCAL).
- Enrichment programs aimed at meeting people’s personal development and special interest needs.
ACE’s role in developing Australia’s human capital

The four strategic directions of the ACFE Board as indicated in *ACE into the 21st Century: A Vision* are building communities through ACE, building ACE resources and learning infrastructure, strengthen strategic relationships within and beyond ACE, and building knowledge and promote recognition of ACE (2001, p. 7).

**Queensland:** No current information on ACE policy and provision in Queensland was located. A 2001 report commissioned by the former Queensland Adult Community Advisory Committee, *The untapped potential: benefits for the individual, the community and the workplace*, provides some insights into Queensland ACE. The report indicated uncertainty about the extent of provision by stating “today ACE in Queensland is provided by an unknown quantity of diverse public, private and community organisations and individuals undertaking a wide variety of learning programs (p. 4). The comprehensive nature of the project in terms of the wide consultation undertaken and the amount of data collected suggests the following key findings about the State of the Queensland ACE sector at the time are reliable and valid (p. 7):

- The Queensland ACE sector is alive and well and providers are offering the friendly, encouraging and supportive environment sought by learners.
- A broad range of learning is undertaken in the community. The majority of learning programs concentrates on personal development, business administration skills (including computing), general education (including language, literacy and numeracy), community work and recreational activities.
- The cost of learning and the lack of personal confidence (due to various reasons) appear to be the most frequent issues preventing people from undertaking learning.
- 57% of ACE providers surveyed want to know more about the vocational education and training (VET) system, particularly how to form networks with enterprise and industry, and how to access funds.
- 40% of providers surveyed were registered to offer accredited training.
- The ACE sector is highly reliant on volunteers and part-time workers as they comprise over 60% of a community organisation’s personnel.
- ACE providers are well placed and have a value-adding role in assisting people to gain confidence, general education skills and life skills to enable them to continue further learning and skills development.
- Learning in regionally remote areas of Queensland is difficult and expensive to deliver and access.
- It is difficult to gather specific data on ACE providers in Queensland as many do not identify themselves with the ACE sector and very little data is voluntarily given or recorded.
- There appears to be potential to develop ‘learning communities’ through a coordinated community approach. Collaboration in forming partnerships, shared resources, funding and marketing of available programs is required. This ‘untapped potential’ would result in benefits for the individual, the community and the workplace.

**South Australia:** Adult Community Education in South Australia is non-accredited and non-formal. The Employment and Skills Formation Directorate, within the Department of Further Education, Employment, Science and Technology, supports the delivery of Adult Community Education. Through its ACE Grant Program, the SA Government supported 67 community based organisations to deliver local learning programs in 2004/2005, with a priority given to those programs that support the development of language, literacy and numeracy skills. This program also supports professional development for people working in organisations that receive grant funds.

The Adult Community Education Reference Group provides advice to the Training and Skills Commission on the performance of its functions relating to adult community education. In 2005, the reference group drafted a *Community Learning Statement* in 2005 for community consultation. The six objectives of *South Australia’s Strategic Plan –*
Creating Opportunity are the key drivers of this Community Learning Statement (Adult Community Education Reference Group, 2005, p. 4):

- **Growing Prosperity** by ensuring that more South Australians share in the benefits of economic growth because they have acquired skills that lead to employment.
- **Improving Wellbeing** by raising community awareness of preventative measures to improve health and safety standards and increase lifestyle quality.
- **Attaining Sustainability** by providing avenues to educate the community on environmental issues including water and energy conservation and land and marine biodiversity.
- **Fostering Creativity** by sponsoring a range of creative learning opportunities and resources for South Australians to become more innovative, creative and enterprising.
- **Building Communities** by increasing social capital through the provision of training for persons involved in community welfare, voluntary activities and community capacity building.
- **Expanding Opportunity** by improving access to education for all sectors of the community, particularly those disadvantaged by social, cultural, financial or geographic factors.

**Western Australia:** The Department of Education and Training, in conjunction with the Department’s ACE Advisory Committee and the broader ACE community, recently released the *Adult Community Education (ACE) Strategy for all Western Australians 2004-2008*. The Strategy, launched on 26 March 2004, included four goals for ACE:

- Enhancing the capacity of community based organisations to deliver ACE.
- Raising public awareness of the learning opportunities offered by ACE.
- Improving providers’ and tutors’ access to information and skills development.
- Increasing the diversity of learners and communities using ACE especially Indigenous learners and learners with a disability.

ACE in Western Australia is characterised as being the fourth sector of education, offering non-accredited, learner focused and community based training. The strategy aims to build on the strengths of the sector which include accessible and inclusive learning opportunities; enabling individuals to share their skills and knowledge with others in a supportive environment; welcoming environments and non-threatening, non-competitive learning; enhancing individual relationships and community partnerships; learner and community-driven learning; valuing learning for its own sake; introducing people to the pleasures of lifelong learning; offering pathways to further education, training and employment for some learners; and building communities through learning (Western Australian Department of Education and Training, 2004, p. 4).

ACE is provided by a large number of community organisations, generally, but not exclusively, non-government, non-profit organisations under local community management. Some of the major ACE providers in WA include TAFEWA colleges, senior colleges (Tuart and Canning Colleges), libraries, universities, job centres, ethnic associations, seniors education associations (such as U3A and MALA), Indigenous organisations, Community Neighbourhood Houses and Learning Centres, and environmental groups. Adult Community Education options for learners in rural and remote areas have been increased with the establishment of the community-based and managed WA Telecentre Network and learning centres.

**Tasmania:** The Tasmania Government regards Adult and Community Education (ACE) as “a process whereby people choose to engage in a diverse range of learning activities within community and other settings to develop their personal, social, cultural and economic potential and thereby contribute to the wellbeing of the broader community” (Tasmania Department of Education, 2004). *Tasmania: A State of Learning: Adult and Community Education Policy* was released in September 2004. The policy includes four goals and a range of requirements to guide the future development and provision of ACE in Tasmania, which are also in line with national (MCEETYA) goals (Tasmania Department of Education, 2004, pp. 7-9):
• The distinctive characteristics of adult and community education in Tasmania will be identified, recognised and supported so that the learning needs of Tasmanians and their communities are met.

• Awareness and understanding of the role and importance of adult and community education in Tasmania will be increased.

• Opportunities for participation in adult and community education in Tasmania will be recognised, diversified and extended.

• The quality of adult and community education learning experiences and outcomes in Tasmania will be improved.

**Australian Capital Territory:** In 1997, the ACT Government released the *ACT Policy on Adult and Community Education* and established the Advisory Council on Adult and Community Education. The Council provides advice on the shape and direction of ACE policy, the annual ACE funding program, and promotion of Adult Learners’ Week. It also established the *Canberra as a Learning Community Committee* to plan and coordinate action, and to provide advice on desirable initiatives.

ACE in the ACT is regarded as a response to the lifelong learning needs of the community, and described as learner-centred, for everyone, covering a wide variety of learning, and responsive to the community. In line with the MCEETYA goals, the ACT Government has set the following key goals for ACE (ACT Department of Education and Training, 2005):

• Expand and sustain innovative community-based learning models.

• Raise awareness and understanding of the role and importance of adult community education.

• Improve the quality of adult community education learning experiences and outcomes.

• Extend participation in community based learning.

Each year since 1998, the ACT Government has funded between 20 and 30 ACE programs covering a wide variety of learning areas such as the arts, general education, community participation, employment skills and self-help. ACE training providers submit tenders for the delivery of their programs in 2005 (up to $15,000) and are ranked according to three selection criteria:

• Meets a demonstrated need within the community especially target/equity groups and identified disadvantaged groups.

• Capacity to diversify and increase access to adult learning activities in the ACT.

• Contributes to individual and community development in the ACT.

**Northern Territory:** No information about ACE policy and provision in the Northern Territory was located.
## APPENDIX C: EXAMPLES OF ACE PROVISIONS FOR TRAINING FOR EMPLOYMENT OUTCOMES AND TRAINING FOR IMPROVED PATHWAYS

<table>
<thead>
<tr>
<th>Industry</th>
<th>ACE VET: training for employment outcomes</th>
<th>ACE provisions: training for improved pathways</th>
</tr>
</thead>
</table>
| Automotive          | NSW Certificate II in Automotive Mechanical - Pre-Employment  
WA Course in Automotive Family of Trades (Pre-apprenticeship)  
ACT Course in Introduction to Automotive | • Car maintenance  
• Driving  
• Motorcycle maintenance |
| Aviation            | SA Course in Aviation Technical English                                                                               | Home building/DOY  
• Brick laying  
• Cabinet making  
• Furniture restoration  
• Metalwork |
| Building and Construction | VIC Certificate II in Joinery/Shopfitting/Stairbuilding (Pre-apprenticeship)  
WA Course in Introduction to Construction  
SA Certificate I in Vocational Education – Shipbuilding  
ACT Course in Construction Site Safety Induction | Business and finance  
• Accounting  
• Book keeping  
• Business plan writing  
• Conveyancing  
• E-business  
• Financial planning  
• Investing  
• Leadership  
Computers and IT  
• Adobe Acrobat  
• Adobe Illustrator  
• Adobe PageMaker  
• Adobe Photoshop  
• Animation  
• ASP  
• AutoCAD  
• BAS  
• Biznet  
• C++  
• CAD  
• Claris/Appleworks  
• Cold fusion  
• Corel Draw  
• Databases  
• Desktop publishing  
• Dreamweaver  
• Microsoft Outlook  
• Introduction to computers  
• JavaScript  
• LAN  
• Linux  
• Lotus Notes  
• Microsoft Access  
• Microsoft Excel  
• Microsoft Office  
• Microsoft Power-Point  
• Microsoft Project  
• Microsoft Publisher  
• Microsoft Word  
• Email  
• Flash  
• Graphic design  
• GroupWise  
• HTML  
• ICDL  
• Internet  
• MOUS  
• MSCE  
• MYOB  
• Networking  
• Programming  
• QuarkXpress  
• QuickBooks  
• Scanning  
• Spreadsheets  
• SQL  
• Typing  
• Unix  
• Visual basic  
• Web page design  
• Windows | Paving  
• Tiling  
• Upholstery  
• Welding  
• Woodwork  
• Management  
• Marketing  
• Negative gearing  
• Project management  
• Real estate investment  
• Shorthand  
• Small business  
• Stock market investment  
• Taxation |
| Business            | QLD Certificate II in Business Skills for Workforce Re-entry  
VIC Certificate II in Small Business (Operations/Innovation) | Management  
• Marketing  
• Negative gearing  
• Project management  
• Real estate investment  
• Shorthand  
• Small business  
• Stock market investment  
• Taxation |
<table>
<thead>
<tr>
<th>Industry</th>
<th>ACE VET: training for employment outcomes</th>
<th>ACE provisions: training for improved pathways</th>
</tr>
</thead>
</table>
| Community and Health Services  | TAS Course in Environmental Health Bridging Science  
QLD Certificate I in Community Living Skills  
SA Course in Community Development using the Arts  
WA Training Program; Introduction To Public And Community Arts  
WA Course in Aboriginal Primary Health Care Program Work | Health & wellbeing  
• Aromatherapy  
• First Aid  
• General fitness  
• Massage  
• Menopause  
• Natural health and healing | Nutrition  
• Relaxation  
• Sports and activities  
• Stress management  
• Yoga and meditation  
• Weight loss |
| Energy                         | ACT Course in Introduction to Renewable Energy  
NSW Course in Renewable Energy  
On Farm – Maintenance  
NSW Course in Renewable Energy  
On Farm – Application | • Electronics |
| Food Processing                | SA Training Program in Food Handling for Retailers  
NSW Certificate I in Food Skills For Living |  | |
| Manufacturing and Engineering  | QLD Certificate I in Engineering (Manufacturing)  
SA Certificate I in Vocational Education - Mechanical Engineering  
QLD Statement of Attainment Not Identifiable in Engineering (Pre-Apprenticeship) |  | |
| Marine                         |  | • Boating  
• Fishing  
• Navigation  
• Sailing |
| Mining                         | WA Certificate I in Metalliferous Mining (Aboriginal Mining Program) |  | |
| Primary and Rural              | WA Certificate I in Rural Skills (Entry Level Training)  
VIC Certificate II in Vocational Studies (Agriculture – Grains)  
VIC Certificate II in Vocational Studies (Agriculture – Dairy)  
VIC Certificate II in Vocational Studies (Agriculture – Sheep)  
VIC Certificate II in Vocational Studies (Agriculture – Beef) | • Composting  
• Gardening  
• Horticulture  
• Landscaping  
• Land management  
• Permaculture  
• Sailing |
| Tourism and Hospitality        | ACT Course in Preparing for the Tourism and Hospitality Industry  
SA Course in Hospitality (Backpacker Hostel Operations)  
VIC Certificate I in Vocational Studies (Hospitality)  
VIC Statement of Attainment Introduction to Heritage Tourism in the Community | Food and wine  
• Bar courses  
• Beer making  
• Cooking  
• Knife skills  
• Wine making |
| Employability Skills           |  | • Adult literacy and numeracy  
• Employment skills  
• Vocational training |

CONTACT

Level 1, 32 Northbourne Avenue, Canberra

Write to:
ADULT LEARNING AUSTRALIA INC.
PO Box 260, Canberra City
2601 ACT

Phone 02 6274 9500
Fax 02 6274 9513
Email info@ala.asn.au
Web www.ala.asn.au

For more information about who we are and what we do:
• Call 1300 I LEARN (1300 453 276), or
• Visit www.ala.asn.au/about.html