VET in the learning age: The challenge of lifelong learning for all

Volume 1

Peter Kearns, Rod McDonald, Philip Candy, Susan Knights and George Papadopoulos
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This study of the implications of lifelong learning for vocational education and training (VET) was commissioned by the National Centre for Vocational Education and Training, and was undertaken by Global Learning Services during 1998.

The study found that

- major changes in the socio-economic environment of VET made it essential that the sector develop and implement coherent policies and strategies to advance lifelong learning opportunities for all
- this will require strategic partnerships at all levels to encourage and support learning in a wide range of contexts
- all stakeholders have a vital interest in such partnerships for economic, social, equity, and personal fulfilment reasons
- Australia lags behind other Organisation for Economic Cooperation and Development (OECD) countries, including Britain, in responding to the challenge of lifelong learning in the new era
- maintaining employability in a context of exponential change is a key challenge
- contextual changes threaten the notion of a democratic, inclusive society, and require strategic responses
- using modern information and communication technologies wisely for learning purposes is a key challenge
- new policies and strategies will be required, including strategies such as the Learning City which build strategic alliances and partnerships

Responding to the critical challenge of lifelong learning will require an evolutionary approach with priorities carefully selected to gain maximum leverage. Initial priority will need to be given to coordinated demand side policies, which will promote a demand for learning on a whole-of-life basis among the significant proportion of the Australian population not participating in learning activities after school.

Tensions—between market forces and planning, competition and collaboration, market driven training and equity, the needs of industry and individuals, and between specific vocational competencies from the recent past and generic core competencies for the world of the future—remain unresolved, and need to be addressed in the transition to a just learning society.

Overall, achieving a learning culture in Australia will require a learning revolution in Australian society with concerted action involving all stakeholders.
The challenge of a new era

The challenge of lifelong learning derives from the characteristics of the emerging new era confronting Australian society.

This is an era of exponential change and radical discontinuity which has been termed an era of 'punctuated equilibrium.' Traditional policies and responses are no longer relevant, and new strategies are required.

The report considers the impact of globalisation, new information and communication technologies, major changes in the workplace and in the organisation of work, the shift from an industrial and service economy to a knowledge-based economy, and shifts in social attitudes and values which, in their cumulative impact, have produced a context of radical discontinuity.

The exponential pace of change is producing a world of 'blur,' in which traditional boundaries are disappearing. This has profound implications for the work of vocational education and training.

The implications of the emerging knowledge-based economy have not been sufficiently considered in Australia. Broad policies and strategies are needed that address the critical relationships between learning in the workplace, the generation and use of new knowledge, innovation, and economic outcomes. The report considers strategies, such as the learning organisation, which address these issues.

The concept and its implications

The broad definition of lifelong learning adopted for this project was confirmed in consultations undertaken across Australia.

This definition is:

*Lifelong learning is a continuously supportive process which stimulates and empowers individuals to acquire all the knowledge, values, skills, and understanding they will require throughout their lifetimes and to applying them with confidence, creativity and enjoyment in all roles, circumstances and environments.*

This broad definition of lifelong learning points to the wide range of economic, social, psychological, and community roles that the concept involves.

The contemporary concept of lifelong learning involves both formal and informal learning, and occurs in the workplace, home and many community contexts, as well as in education institutions.

For this reason broad strategies are required that associate all stakeholders for concerted action.

*Our central purpose in lifelong learning must be to secure a socially cohesive and economically prosperous nation recognising that these aspirations are mutually reinforcing in that personal fulfilment, employability, and competitiveness are all part of the same piece.*

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VET in the learning age: The challenge of lifelong learning for all
International trends

An overview of international trends, prepared for this study by Dr George Papadopoulos, a former OECD Deputy Director with education responsibilities, confirmed the main findings of the study.

Key findings from this study include the following:

- International agencies such as the OECD, the United Nations Educational, Scientific and Cultural Organisation (UNESCO), the Council of Europe, and the European Union have all given top priority to lifelong learning.
- Lifelong learning is now the master concept for the OECD's work on education and training.
- While there is widespread acceptance of lifelong learning as a panacea for a diverse range of economic, social, cultural and political problems, there has been limited progress in giving effect to the concept.
- The strength of a range of barriers and vested interests is tending to lead to ad hoc approaches, rather than comprehensive, holistic policies and strategies.
- However, the British government has sought a strategic comprehensive approach in a Green Paper 'The Learning Age' that was released in February 1998. This includes innovative strategies such as University for Industry (UfI), and a system of individual learning accounts to advance lifelong learning.
- The concept of lifelong learning has evolved over the past twenty years in line with key contextual changes. The main driving force behind the current advocacy are the economic-cum-technological imperatives and the needs arising from increasingly knowledge and information based economies. However, the policies of the European Union (EU) have shifted over this decade from this economic focus to a broader recognition of the role of lifelong learning in supporting social, employment, and economic objectives of EU policies.

The overview of international trends shows that Australia lags behind leading European countries in responding to the challenge of lifelong learning.

Case studies

Five case studies undertaken for this study—in Albury-Wodonga, Ballarat, Devonport, Newcastle, and Canberra—also confirmed the conclusions emerging from the overview of international trends.

They reveal significant barriers that impede the progress of lifelong learning with insufficient strategic partnership development. The main barriers include the negative attitudes of many people towards learning, as well as cultural, funding, and administrative barriers that impede co-operation and partnership for learning. Tensions arising from conflicts of values need to be addressed.

However, there are various indications of change in the case studies. Both Wodonga and Ballarat are looking to develop as Learning Cities, and Wodonga in late 1998 declared itself Australia's first Learning City. Adult and community education has been strengthened in each of the cities studied.
National policy for lifelong learning

There is no national policy for lifelong learning, and separate national goals exist for each of the sectors of education and training. The absence of a shared national vision for lifelong learning in Australia is a barrier to concerted partnership action towards this objective.

National policy in the VET sector up to now has had a strong training focus, and lifelong learning objectives have been incidental.

However, there is a national policy for adult and community education (ACE) which is centred on lifelong learning and the contribution of the sector to the development of Australia as a Learning Society.

These different perspectives, and the absence of master concepts to concert the work of the various education sectors, have led to a broad spectrum of conceptual, funding, and practical issues at the VET/ACE interface. Key issues relate to national and State/Territory roles in funding programs on the basis of a perceived or declared vocational orientation.

The study points to the need for a shared national vision for lifelong learning, to guide partnership action towards the development of Australia as a Learning Society.

A razor's edge of opportunity and threat

The study concludes that lifelong learning in the emerging conditions of the 21st century poses a razor’s edge of opportunity and threat that will require vision, holistic policies and strategies, strategic partnership action involving all stakeholders, and the progressive development of a learning culture in industry and in society.

Such action is essential to avoid the danger of a ‘two-thirds’ society, and to foster Australian industry that is innovative and competitive in world markets. Common interest requires partnership action.

The responses

The report identifies six key responses to the challenge of lifelong learning for all.

These responses are:
- promoting understanding and demand for lifelong learning
- building strategic partnerships
- achieving equity in a Learning Society
- using technology wisely
- responding to a knowledge-based economy
- orienting VET institutions to lifelong learning objectives

Recommendations are made for action in each of these areas to advance lifelong learning in Australia.
Implications for VET

The study concludes that the challenge of lifelong learning has profound implications for vocational education and training, and will lead to a new phase of VET development in Australia that will deepen and enrich the contribution of VET to Australian society. This will build upon the achievements of training reform, and extend the role of VET in partnership action, in supporting lifelong learning in many contexts.

Priorities are identified for action by the Australian National Training Authority. These include:
- assessing the implication of a knowledge-based economy for vocational education and training
- reviewing whether the agreed national set of generic key competencies should be extended to include learning to learn and possibly other generic competencies needed in the Learning Age
- reviewing the implications of lifelong learning for funding policies
- supporting partnership action for learning, including the small business sector
- encouraging VET institutions to develop as learning organisations

VET—because of its ‘frontier’ role at the intersection of the formal education system, industry, adult and community education, and the community—can play a key role in encouraging and supporting partnership action. There is great opportunity for innovative responses.

Australia as a learning society

The overall conclusion of this study is that it is essential for concerted action to be taken to develop Australia as a learning society. Active leadership and partnership among all stakeholders will be required if the necessary learning revolution in Australian society is to be achieved. There is a vital national interest for this to happen, to ensure a competitive economy, maintain employability, build community, enhance personal fulfilment, and generally to advance a democratic inclusive society in the emerging conditions of the 21st century.
Recommendations

The recommendations of the report are set out below in relation to the particular bodies they are addressed to. They are also shown in appendix 6, in relation to the principal themes of the report. The recommendations are brought into an action framework with four levels in figure 10.

Ministerial Council on Employment, Education, Training and Youth Affairs (MCEETYA)

1. That MCEETYA give consideration to the implications of lifelong learning as a master concept for the development of all sectors of education and training—including the question of incorporating the concept into the review of the national goals for schooling, vocational education and training, and adult and community education, in order to ensure that a coherent framework of national goals exists that is compatible with, and supportive of, the essential requirement of advancing lifelong learning opportunities for all Australians.

2. That, in exploring the implications of lifelong learning as a master concept for Australian Education and Training, MCEETYA consider undertaking or commissioning studies of the boundaries between VET and higher education on the one hand, and VET and secondary education on the other. Such studies should explore structural, ideological, funding and policy impediments to greater collaboration.

National and State/Territory governments

3. That all Governments - national, State or Territory, and local - note their critical role in promoting prosperity in an inclusive society through knowledge-based enterprises, and accordingly commit themselves to considering ways in which they can provide leadership in fostering lifelong learning and in developing the framework for a learning society.

4a. That governments note the urgent need for coordinated demand-side policies that will promote a demand for learning on a whole-of-life basis among those not participating in learning activities beyond the level of schooling.

4b. Such policies should give priority to information and guidance activities, special events to promote lifelong learning, and to strategies such as the Learning City approach, which forge strategic partnerships to foster a culture of learning.
4c Strengthening the research base for demand side policies is a necessary part of this development, and should include participation and attitudes to learning surveys.

5a That the VET sector recognise the enhanced significance, in the context discussed in this report, of policies and strategies that are directed at foundations for all and which strengthen and diversify pathways, bridges, and transitions on a whole-of-life basis.

5b Such policies and strategies should recognise the changing nature of work and non-work activity in Australian society, so that personal fulfilment and community development objectives are linked to the pattern of vocational pathways.

6 That governments take account of the need to align their equity policies and strategies with the objective of lifelong learning for all and develop their policies and strategies with this orientation.

7a That national and State VET authorities note the need to expand the provision of local community-based programs that provide easy supported access to computing skills for individuals and groups lacking this capability and which open pathways for the acquisition of more advanced knowledge and skills.

7b The value of networks of local learning centres in meeting this requirement should be noted.

Australian National Training Authority (ANTA)

8 That ANTA review the implications of the emerging knowledge-based economy, and associated socio-economic changes; for the work of the VET sector—including the question of whether the current approach to competency-based training requires modification or further development.

9 That ANTA, in association with the Department of Education, Training and Youth Affairs (DETYA), review the question of whether the agreed national set of generic key competencies should be extended to include learning to learn and possibly other generic competencies needed in the Learning Age, as essential generic competencies required by all as the foundation for lifelong learning in a learning society.

10 That ANTA, in collaboration with other stakeholders, review its funding policies for VET in the light of requirements to provide incentives for lifelong learning and generally to progress lifelong learning in Australia.

11a That ANTA encourage innovation in the application of learning organisation principles in the small business sector through funding pilot projects to test the development of small business learning networks that apply these principles in a range of contexts.

11b These projects should have regard to international experience in the development of small business learning networks.
12 That ANTA convene a national conference on equity policies and strategies during 1999, to consider the implications of lifelong learning for equity strategies and the features of a national co-operative approach to equity that would address the identified issues so as to progress the objective to lifelong learning for all.

13 That ANTA encourage VET institutions to develop as learning organisations, by funding a series of case studies directed at identifying successful strategies and barriers in a range of contexts and good practice principles which could be more widely applied by institutions.

14a That ANTA fund a study involving a set of case studies to examine issues and opportunities in the application of the Learning City strategy in Australian metropolitan contexts.

14b This study should have regard to international trends in Learning City Development and the special needs of individuals and groups disadvantaged in access to lifelong learning opportunities.

Department of Education, Training and Youth Affairs

15a The conclusions of this study support the need for a comprehensive, nationally consistent careers information guidance and counselling service as a priority requirement in fostering lifelong learning in Australia, so that we support the proposal of Adult Learning Australia for a systematic study into the nature and scope of such a service.

15b This study should give priority to the needs of non-participants in learning.

16 That we strongly support the proposal of Adult Learning Australia for the Australian government to fund a pilot program of Learning Town/Learning City development in a range of contexts, in order to test principles for strategic partnership development to support lifelong learning for all and to progress Australia towards becoming a learning society.

17a That regular national surveys of participation in adult learning be undertaken in order to guide policy for lifelong learning and monitor progress.

17b These surveys should be broadened to explore community attitudes to learning along the lines of the British MORI surveys sponsored by The Campaign for Learning.

National Centre for Vocational Education Research (NCVER)

18 That NCVER, in association with other stakeholders, note the research needs identified in this report arising from the transition towards lifelong learning in Australia, and give consideration to ways of addressing these needs in national research action.

19a That NCVER institute a lifelong learning monograph series in order to foster an on-going dialogue among stakeholders on key issues relating to the role of vocational education and training in the transition to a learning society.
19b That NCVER consider adapting the relevant chapters of this report for this purpose, relating to learning organisations, learning communities, and international trends.

19c That NCVER establish a Lifelong Learning Information Service through a dedicated web page.

20 That NCVER, in association with ANTA, sponsor the visit to Australia by one or two British practitioners who have been involved in Learning City development, to conduct a series of seminars in selected Australian locations on strategies for Learning City development.

Industry associations

21a That business and industry associations take action to promote understanding and demand for lifelong learning throughout industry, so that industry is an active partner in the development of a learning culture in industry and in Australian society generally.

21b This promotion should include strategies such as the learning organisation and learning community discussed in this report.

VET institutions

22a That VET institutions review their learning strategies for students in the light of lifelong learning objectives and the principles for a learning-focussed pedagogy given in this report.

22b That the profile of a lifelong learner set out in this report should be taken into account in this review.

22c This review should lead to the progressive implementation and extension of learning strategies directed at assisting students to become motivated, self-directed lifelong learners.
Part 1: Background

Part 1 of the report sets out the general approach adopted, identifies the key issues and themes examined, and comments on the key contextual changes which are making lifelong learning for all imperative. Development toward national policy for lifelong learning is discussed against the context of international developments. These include the work of international agencies such as the Organisation for Economic and Cultural Development (OECD), the United Nations Educational, Scientific and Cultural Organisation (UNESCO), and the European Commission and policies developed by some governments in OECD countries.
1 Introduction

There is growing international recognition that achieving lifelong learning for all is the central challenge for education and training policy in the emerging conditions of the 21st century.

This recognition is reflected in the activities of international agencies, including the OECD, UNESCO and the European Commission, and in action taken by governments such as those of Britain, Norway, and Finland, to develop comprehensive policies for lifelong learning.

This study was commissioned by the National Centre for Vocational Education Research (NCVER) to examine the implications of lifelong learning for vocational education and training (VET) in Australia.

The study was directed at three principal questions:

1. What are the implications of lifelong learning for VET?
2. What is the current situation?
3. What needs to happen?

The terms of reference of the study are set out in appendix 2. The study has been undertaken jointly by Global Learning Services Pty Ltd and the Research Centre for Vocational Education and Training (RCVET) at the University of Technology Sydney. The members of the project team were:

- Peter Kearns, Managing Director, Global Learning Services (Project Leader)
- Professor Rod McDonald, Director, RCVET, University of Technology Sydney
- Professor Philip Candy, Deputy Vice Chancellor, University of Ballarat
- Susan Knights, Senior Lecturer in Adult Education, University of Technology Sydney
- Dr George Papadopoulos, Formerly OECD Deputy Director responsible for education activities.

The project team was guided by a Reference Group which provided assistance in a number of ways throughout the course of the project. The members of the Reference Group are listed in appendix 4.

Methodology

The methodology adopted for the project involved the following steps:

- a literature review leading to the preparation of a discussion paper which was released for comment in June 1998
consultations across Australia with stakeholders in the period from June to October 1998 focused on the discussion paper
case studies undertaken in five locations: Albury-Wodonga, Devonport, Ballarat, Newcastle, and Canberra
investigations into developments in other OECD countries including a visit by the Project Leader to England and Paris in September 1998 for discussions with the OECD, the British Department of Education and Employment, Learning City Network, Campaign for Learning and other interested parties; an overview of international trends was prepared for the team by Dr George Papadopoulos
the preparation of an Interim Report, which was discussed at a national seminar in Sydney in November 1998

Organisation of report

Our report has been presented in two volumes:
- Volume 1—The report
- Volume 2—Overview of international trends and case studies

While the case studies are given in Volume 2, short summaries of each case study have been included as appendix 5 in Volume 1.

Our Volume 1 report has been structured into four parts to reflect our assessment of the key themes and issues emerging from our study:
- Part 1—Background
- Part 2—Contexts for learning
- Part 3—Challenges
- Part 4—Towards the Learning Society

By doing this, we have sought to achieve a balance between the vision and aspiration of lifelong learning and the need to give concrete operational form to the concept. The challenges identified in Part 3 provide a concrete action agenda which needs to be addressed in progressing the aspiration of lifelong learning for all.

The concept

In our discussion paper, we observed that the concept of lifelong learning had evolved in recent decades in line with key contextual changes.

Whereas in the 1970s the work of both the OECD and UNESCO was focussed upon access to formal education and training over a whole of lifespan, the contemporary focus is on lifelong learning in a wide range of contexts and forms. The evolution of the concept is discussed in the Overview of international trends prepared by Dr George Papadopoulos for the team, given in Volume 2.

This evolution means that it is important to make a conceptual distinction between lifelong education and training as advocated by UNESCO and the OECD in the 1970s—in such reports as Learning to Be, and the OECD work on recurrent education—and lifelong learning, which is a broader concept embracing a wide range of forms of learning. Whereas equity and personal fulfilment were the main influences upon these 1970s reports, the key 1990s reports on lifelong learning have been influenced by a broader mix of economic,
employment, social, cultural, and educational objectives, reflecting the more complex and uncertain contemporary environment discussed in chapter 2 below.

The broad mix of socio-economic objectives associated with the contemporary view of lifelong learning is important in exposing the interdependencies which exist between these contexts and objectives for lifelong learning. This is a central theme of this report which is discussed below and in Part 2.

Some of the main shifts between the 1970s concept of lifelong education and the contemporary concept are summarised.

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<th>Lifelong education 1970s concept</th>
<th>Contemporary concept of lifelong learning</th>
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<td>Recurrent education</td>
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In our discussion paper we cited a broad definition of lifelong learning formulated by the European Lifelong Learning Initiative (ELLI):

*Lifelong learning is a continuously supportive process which stimulates and empowers individuals to acquire all the knowledge, values, skills, and understanding they will require throughout their lifetimes and to apply them with confidence, creativity and enjoyment in all roles, circumstances, and environments.*  
(World Initiative on Lifelong Learning 1994, p.5)

This broad definition of lifelong learning points to the wide range of economic, social, psychological and community roles that the concept involves.

The application of the concept in these roles means that we have taken a strong interest in a number of contexts for learning in this report. These contexts are defined in our Glossary in appendix 1, but we have repeated in exhibit 1 below the definitions we have used for some key contexts. These contexts are: lifelong learner, learning organisations, learning communities, Learning Cities, learning economy and learning society.
Lifelong learner
A lifelong learner is an individual with the motivation and capability to continue learning throughout life in a range of social and work contexts so as to achieve personal fulfilment and maintain employability.

Learning community
A learning community is any group of people, whether linked by geography or by some other shared interest, that addresses the learning needs of its members through pro-active partnerships. It explicitly uses learning as a way of promoting social cohesion, regeneration and economic development.

Learning Cities
Cities are not simply places where large numbers of people live and work; they are also places where people experience leisure, culture, enterprise, and education. In other words places that have learning at their heart. A Learning City unites all the diverse providers of learning to meet the needs and aspirations of all its citizens. Through the range of resources they bring together, Learning Cities can provide local solutions to local challenges.

Learning economy
The learning economy is based on the view that knowledge is the most fundamental resource in a modern capitalist economy, and learning the most important process, thus making the learning capacity of an economy of strategic importance to its innovativeness and competitiveness.

Learning society
A learning society is one in which everyone who wants to do so is able to participate in education and training (formal and informal) throughout their lives. Information about learning opportunities is widely available, provision is driven by demand rather than by supply, and learners—or potential learners—are enabled and empowered to pursue their individual preferences through financial arrangements and incentives at national, regional and local levels.

We found in our consultations a general consensus that a broad definition of lifelong learning was necessary, and that there was no significant dissent from the ELLI definition that we have adopted.

The contemporary concept of lifelong learning therefore incorporates the following ideas:

- learning occurs through the life-cycle of an individual in a wide range of contexts
- it encompasses both formal and informal learning
- everyone should be able, motivated and actively encouraged to learn throughout life
- lifelong learning relates not only to changes in the workplace, but also to ‘a continuous process of forming whole human beings’
- the concept associates economic development objectives and maintaining employability with personal fulfilment and community development

The application of this mix of ideas and objectives will vary according to contexts and settings, but the evidence available to us points to the conclusion that the more holistic and integrated strategies are across these domains of life and work, the more value added outcomes are likely to be.

The Declaration on Adult Education from the 1997 UNESCO Hamburg Conference (The Hamburg Declaration) captures these themes in the following statement:

*The objectives of youth and adult education, viewed as a lifelong process, are to...*
develop the autonomy and the sense of responsibility of people and communities, to reinforce the capacity to deal with the transformations taking place in the economy, in culture and in society as a whole, and to promote coexistence, tolerance and the informed and creative participation of citizens in their communities, in short to enable people and communities to take control of their destiny and society in order to face the challenges ahead.

(UNESCO 1997, p.2)

These key themes of individual sovereignty and responsibility, empowerment of individuals and communities, and adjusting to the transformations occurring in the economy, are taken up in the following chapters of this report.

Vertical and horizontal integration

We have adopted the view of lifelong learning set out by one of the members of this team in 1991. In this work Professor Candy asserted that lifelong learning differs from the traditional education system in two ways:

- **Vertical integration**, which offers a systematic opportunity for learning at any age.
- **Horizontal integration**, which includes a recognition and utilisation of the principle that people learn in a variety of contexts and settings.

In the case of vertical integration, lifelong learning offers a means of moving beyond a ‘front-end’ system of education and training, so that individuals continue to learn and develop throughout life, encouraged and supported by the mechanisms and incentives of a learning society.

However, as the scope of our report is restricted to the VET sector, we have not examined some issues in vertical integration—such as relations between the sectors of education and training—in a comprehensive way, although we touch on some aspects in our comments on strategic partnerships in chapter 10.

Rather, the focus of our study is on horizontal integration in the range of contexts and settings in which learning occurs. This is particularly relevant to the role of the VET sector and adult and community education (ACE). In Part 2 we discuss learning in four key contexts: individual learning, learning in organisations; communities, and in society overall. The recognition of interdependencies between these contexts is central to the argument of this report.

The VET role, in association with its alter-ego ACE, can be critical in establishing the necessary linkages between these contexts and settings, so that interdependencies are turned into value added outcomes for individuals, enterprises, communities, and society overall. This is a case for a win/win situation for all stakeholders.

Four pillars of lifelong learning

Our emphasis in this report on the interdependence of individual, economic, and social contexts for learning is underpinned by a conceptual framework for human development in work and in society; this is reflected in the work of the Harvard psychologist Howard Gardner, who developed the theory of multiple intelligences.
Gardner, in his study of ordinary and extraordinary performance, identifies three basic sets of relationships which interact and which influence human achievement.

These relationships are illustrated in the diagram below, in relation to domains of performance such as a particular field of work or an art form.

**Figure 1: Key relationships which influence human achievement**

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The major thrusts of VET reform over the past decade have been towards the specific skills and competencies required in various domains of work. While some social aspects have been incorporated through the key competencies, this has generally been subordinate to specific vocational competencies and the ‘individual relates to self’ dimension has been neglected. There is a strong case in the context of lifelong learning and the new economic and social order for a new synthesis in VET that achieves an appropriate balance between domain specific knowledge and skill, personal development, and social development.

The requirement for such a new balance was recognised by the UNESCO Commission on Education for the 21st Century, both in its general philosophy for lifelong learning and in its concept of ‘the four pillars of education.’

> There is a need to rethink and broaden the notion of lifelong education. Not only must it adapt to changes in the nature of work, but it must also constitute a continuous process of forming whole human beings their knowledge and aptitudes, as well as the critical faculty and the ability to act. It should enable people to develop awareness of themselves and their environment and encourage them to play their social role at work and in the community.

(UNESCO 1996, p.21)

The UNESCO concept of four pillars of education gives further effect to this general philosophy:

- learning to know
- learning to do
- learning to live together/learning to live with others
- learning to be

In a seamless system of provision for lifelong learning—a Learning Society—VET cannot avoid these broad humanistic and social/community objectives and responsibilities. The challenge for VET is to integrate personal fulfilment/learning to be and social/community objectives with specific vocational objectives. Our report takes up the question of how this challenge can be addressed.
**Key themes and dimensions**

In our discussion paper we sought to focus discussion on a few central themes by identifying ‘Five key dimensions of lifelong learning in a learning society.’ These dimensions are set out in exhibit 2.

**Exhibit 2: Five key dimensions of lifelong learning in a learning society**

1. **Foundations for all**
   - provision to ensure that everyone achieves the foundations for lifelong learning
     - learning to learn skills
     - motivation and desire for learning
     - personal mastery to drive lifelong personal development

2. **Strengthening and developing pathways, bridges and transitions**
   - strengthen and extend pathways through education and training into work
   - support the key transitions individuals face
   - ensure support and safety net provision for disadvantaged groups and individuals

3. **Foster learning organisations and institutions**
   - encourage enterprises, institutions, and government agencies to develop as learning organisations
   - integrate work and learning in enterprises
   - recognise informal learning in the workplace

4. **Extend the role of information and learning technologies**
   - ensure everyone achieves basic information literacy
   - make modern learning technologies widely available through the community
   - support and encourage individuals lacking confidence in the use of these technologies
   - use modern technologies to widen equitable access to education and training opportunities

5. **Develop learning communities**
   - encourage and support communities at all levels, to develop them as learning communities: towns, cities, local communities, and common interest networks
   - foster partnership and network development as a key component of learning communities
   - generally foster a learning culture to underpin economic activity and quality of life for all in a learning society

Our consultations across Australia confirmed the importance of each of these dimensions of lifelong learning. There was no substantive dissent from any of these dimensions, and no further dimensions were proposed.

These dimensions point to:
- the centrality of equity objectives in the aspiration for social cohesion in an inclusive society
- the importance of the social contexts in which learning occurs
- the growing role of modern technologies in the transition to a learning society

We have accordingly reflected these dimensions of lifelong learning in the structure of this report and have re-formulated them in a set of values and principles to guide policy for lifelong learning set out in chapter 15.

In addition to these dimensions, it became evident during the various phases of this project that there are certain general themes relating to the journey towards a learning society that are being taken into account in thought and action around the world.
We have sought to formulate these key themes below to provide a framework for the reading of our report.

- **Responding to change**: Lifelong learning needs to be seen as an imperative requirement in a nation’s response to exponential change in the economy and society.

- **Serving multiple goals**: Lifelong learning serves multiple goals in economic, social, and cultural development.
  - Lifelong learning initiatives need to strike a balance between personal, cultural, civic, and social dimensions, and economic and employment concerns.
  - VET has no option but to respond to this imperative.

- **Integration and cross-sectoral action**: There is a consequent need for holistic responses at all levels which link action across a range of sectors to achieve value added outcomes.

- **Contexts for learning**: There is a need to have regard to a range of social contexts for learning and the linkages and interdependencies between these contexts. Our report focuses on individual learning, learning in organisations, and in the community.

- **Interdependencies**: Policy and strategies for lifelong learning should have regard to the interdependencies that exist between the contexts and purposes of learning. This principle challenges a narrow demarcation between vocational and non-vocational objectives and provision in education and training. It suggests an essential foundation for equity strategies.

- **Strategic partnerships**: The development of strategic partnerships between a wide range of stakeholders at all levels is a key requirement in progressing towards a learning society. A learning society is an interwoven and connected society in which economic, social and cultural objectives are interwoven in the tapestry of learning and achievement.

- **Dual aspirations intertwined**: The dual aspirations of lifelong learning towards economic and social objectives should be recognised in policy and strategies ‘for personal fulfilment, employability and competitiveness are all part of the same piece.” Artificial divisions will damage each. The aspiration of a learning society is towards seamless provision, social cohesion, and community.

We recognise that these themes overlap and interact with each other, but this is the nature of lifelong learning. This is an argument for putting people first.

The dual orientation of lifelong learning towards both economic and social objectives is reflected in the work of the OECD and UNESCO, and it is a central theme in the British government’s Green Paper on lifelong learning.

This theme is also strongly asserted in the Kennedy Report on British Further Education:

*Our work over the last two years has confirmed our conviction that learning is central both to economic prosperity and the health of society. We believe that the achievement of economic goals and social cohesion are intertwined.*

(Further Education Funding Council 1997, p.16)

We have accepted this argument and pursued its implications in the various contexts discussed in this report.
These key themes set out above are reflected in the conclusions and recommendations of this report.

Notes

2 Candy 1991.
4 Further Education Funding Council 1997, p.16.
2 Drivers of change

Are the trends in education and training consistent with the development of the post-industrial society, or do education systems continue to develop in accordance with the model of an outmoded industrial society? (OECD 1996)

In periods of punctuated equilibrium, ideologies and technologies, new and old, do not match. (Thurow 1996, p.8)

An era of radical discontinuity

The imperative for ‘lifelong learning for all’ as a central socio-economic objective of policy is being driven by a series of major changes in the environment that are so fundamental in their consequences that this age has been described by the eminent economist Lester Thurow as an era of ‘punctuated equilibrium’.¹

Such eras seldom occur in human history, but in periods of punctuated equilibrium ‘everything is in flux, disequilibrium becomes the norm, and uncertainty reigns.’²

So fundamental are the changes discussed in this report, that we have used the terms ‘New Economy’ and ‘New World’ to designate the new economic environment and the broader socio-economic-technological world that VET must now relate to. The British government’s 1998 Green Paper on lifelong learning also proceeds from the premise that Britain is entering a new era. This is even captured in the title of the report, - The Learning Age: A Renaissance for a New Britain:

We are in a new age—the age of information and global competition. Familiar certainties and old ways of doing things are disappearing... The information and knowledge-based revolution of the twenty-first century will be built on a very different foundation—investment in the intellect and creativity of people.

(Secretary of State for Education and Employment 1998, p.9)

In our discussion paper, we identified a set of driving forces for change that has much in common with the major forces for change noted by ANTA in its National Strategy for VET 1998–2003.³ These forces include:

- the impact of globalisation
- the impact of new information and communication technologies
- a shift from an industrial and service economy to a knowledge-based economy
- major changes in the workplace and in the organisation of work
- shifts in social attitudes and values towards work and leisure

In our consultations, we found general agreement on the significance of these changes, although clearly some were better understood than others. In
particular, responses were generally less well developed in respect of the implications of a knowledge-based economy—including global interconnectedness—and shifts in social attitudes and values towards work and leisure, which are reflected in the emergence of new life styles and patterns. Because it was evident that more consideration needs to be given to the implications of these changes for the work of VET, we comment below on three of the key dimensions of this new environment:

- emergence of a knowledge-based economy
- the interwoven and interconnected nature of the world
- changes in the workplace.

**Emergence of a knowledge-based economy**

There is a broad consensus—evident in the British government’s Green Paper, the work of the OECD, the European Union, UNESCO, and in the work of economists and management theorists such as Lester Thurow, Peter Drucker, and Charles Handy—that one of the defining characteristics of the new era is the emergence of a knowledge-based economy.4

Such an economy is defined by the importance of information, the key role of technology, the pace of change, and the impact of globalisation in opening unprecedented opportunities. In this era ‘brainpower is the only source of strategic competitive advantage’ (Thurow 1996, p.16), with the forces driving the economic system ‘producing a new economic game with new rules requiring new strategies to win’ (Ibid., p.8), while the European Union’s Europe of Knowledge initiative symbolises the new significance of knowledge in the Learning Age. These developments are discussed chapter 13.

The changes discussed above are blurring the traditional distinctions between manufacturing and service sectors, as both manufacturing and service industries become more knowledge-intensive. The changes in banking, financial services, and insurance illustrate some of these changes.

The growing importance of knowledge as the key factor in competitive success means that the linkages between workplace learning, knowledge generation, and knowledge management become increasingly significant. International corporations such as Anderson Consulting, Ernst and Young, and McKinsey’s have sophisticated systems to drive and manage these relationships. We comment on needs in this area in chapter 13.

A further consequence of these developments is a renewed interest in the concept of intellectual capital, which many now see as the prime source of a firm’s competitive advantage. This interest now extends to measurement of intellectual capital, and new techniques have developed for this purpose.5 In a similar way there is renewed interest in social capital as an important factor in commercial outcomes which we discuss in chapter 7.

The implications of a knowledge-based economy has been a neglected area in VET development to date, and requires more attention. A key implication is the requirement to move beyond skill and competence as factors in commercial success, to consider the role of learning, imagination, and creativity in generating and using knowledge for commercial success.
An interwoven and connected world

Closely related to the development of the knowledge-based economy is the phenomenon of global interconnectedness. This is largely the cumulative effect of the telecommunications revolution and globalisation. Interdependence and interpenetration are two of the hallmarks of the new era, as Lipman-Blumen notes:

The connections between concepts, people and the environment are tightening. Technology makes these linkages even tighter. It is an era of interpenetration.
(Lipman-Blumen 1996)

These themes of interdependence and interpenetration (and the related concept of blur) are examined throughout this report in the context of their implications for approaches to lifelong learning.

Congruence of development in an Information Society

The impact of modern information and communication technologies adds a key dimension to the challenge to the emerging new era of the Learning Age. So fundamental is this impact across economic, social, and cultural domains that the present age is often called an Information Society. This notion further strengthens the case for integrated development across economic, social, and cultural domains—a case argued by the European Union’s High Level Group of Experts on Building the European Information Society:

All the opportunities for renewed growth, higher welfare and quality life depend crucially on what we would call the congruence between the technological, economic, and social dimensions of the Information Society.

(European Union High Level Group of Experts 1996, p.1)

Changes in the workplace

While changes in work and the workplace are reasonably well documented, there has been less thinking in Australia than in some overseas countries on the implications of these changes for preparation for work, the role of education, social welfare and support systems, and the long term approach to employment and socially useful roles in an inclusive, active society.

Overseas, a number of studies such as The End of Work, and a recent study by the British Royal Society for the Encouragement of Arts, Manufactures & Commerce (RSA), have sought to address the fundamental issues arising from changes in work and in the workplace.

In part, these changes arise from the impact of technology and globalisation, which have led to phenomena such as re-engineering, down-sizing and outsourcing. Learner firms, core plus periphery models of employment, and the emergence of what Charles Handy has called ‘a portfolio lifestyle,’ are hallmarks of some of the key dimensions of these changes.

The British RSA study Redefining work provides a useful overview of these changes, and a provocative assessment of the implications. This study was undertaken by RSA with an eminent Advisory Council, and with RSA Fellows across Britain participating in seminars and forums.
The conclusions of this study involve a vision of a 'new world of work,' which is fundamentally different to that which education systems have traditionally related to.

Some features are:
- few fixed boundaries between sectors and businesses, private and public sectors
- voluntary organisations are major employers
- homes are international workplaces
- increasingly organisations are 'virtual organisations'
- supermarkets and banks are providers of education
- few fixed boundaries between jobs, while the old concept of job largely disappearing as people apply their skills in roles that change to meet demands
- an intermediate or 'social' labour market growing up alongside the traditional labour market
- more and more work centred upon the exploitation of knowledge, in many forms
- the irrelevance of the old distinction between employment and self-employment?

In these and other ways the concepts of work and jobs are being re-defined. Such a redefinition challenges many of the assumptions upon which the current approach to VET provision in Australia is founded. It involves a compelling case for lifelong learning in a fluid and uncertain society where opportunity and threat are finely balanced. It requires the attributes that are discussed in Part 2 of this report.

The RSA study is also strongly critical of Britain's education and training system:

_We conclude that these are still preparing people for a world that is fast disappearing. A new education philosophy is essential, and a new system that grows from it to meet the needs of a knowledge society._ (Bayliss 1998, p.68)

The Chairman of the Council of RSA, in his Foreword to this study, strikes a chord which is central to the main theme of our report as well:

_Making a reality of the agenda set out in the report will depend on the ability of all these constituencies to develop a shared national vision which transcends conventional boundaries._ (Ibid., p.5)

The outcome of the aspiration for lifelong learning in Australia will similarly depend on this requirement.

**Tensions and value conflicts**

As if these contextual changes were not enough, in any era of radical change there will be tensions between the old and the new which are reflected in conflicts of values, as old certainties disappear.

We found in our consultations and the case studies evidence of such tensions and conflicts. The most frequently commented on was the tension between competition and co-operation in an environment of market driven policies. This
tension is closely related to the conflict between interdependence and individualism/diversity which is also central to the drama of transition to a Learning Society. We comment in Part 4 on the need to address these tensions and to clarify the values base for policies to progress lifelong learning for all.

**VET in a world of ‘blur’**

In an important study of the consequences of the speed of change in the ‘connected economy,’ which builds on the work of the Ernst and Young Centre for Business Innovation in Boston, Davis and Meyer see the prime effect as a blurring of traditional boundaries:

*Connectivity, Speed and Intangibles—the derivatives of time, space and mass—are blurring the rules and redefining our businesses and our lives. They are destroying solutions, such as mass production, segmented pricing, and standardised jobs, that worked for the relatively slow, unconnected industrial world.*

(Davis & Meyer 1998, pp.6-7)

These forces are changing traditional concepts, boundaries, and roles.

*A meltdown of all traditional boundaries. In the BLUR world, products and services are merging. Buyers sell and sellers buy. Neat value chains are messy economic webs. Homes are offices. No longer is there a clear line between structure and process, owning and using, knowing and learning, real and virtual.*

(Ibid., p.7)

This process of ‘blur’ provides an apt description of a number of the key contextual shifts that we observed in the course of this project, and which we discuss above and in other chapters in this report.

**A new age for VET?**

Given the number, magnitude and speed of the changes which we have discussed in this chapter, it should come as no surprise that we believe our society is entering a new era, in which different attributes will be required for success than those which drove success in the industrial and service economy of the past. International bodies such as the OECD, UNESCO and the European Commission are unanimous in their recognition of the imperative need for lifelong learning as a response to this new environment.5

From the international evidence (and from our research within Australia), we have concluded that there is a compelling case for change in Australian education and training in the direction of lifelong learning for all. As a major sector within the educational domain, we conclude that VET needs to be at the forefront of that change. However, it is no exaggeration to state that the magnitude and pace of the changes discussed here means that VET is confronted by a ‘new game, new rules, new strategies.’

Clearly, the cumulative impact of these radical contextual shifts in the environment is to create a new era for VET that is marked by uncertainty, discontinuity, and exponential change. Accordingly, in Parts 2 and 3 of this Report, we comment on the attributes and characteristics of a learning society that is responsive to the pressures of an era of ‘punctuated equilibrium,’ and in Part 4, Conclusions and implications for VET, we turn to a summary of implications which these major changes have for VET.
Notes

2. Ibid., p.8.
4. See works by Thurow, OECD and UNESCO, in References.
3 Development towards national policy for lifelong learning

There is a conceptual inadequacy which haunts present policy and funding mechanisms in adult education and training. It is the insistence upon differentiating educational programs on the grounds of their perceived or declared vocational orientation.

(Senate Committee Report 1997, Beyond Cinderella: Towards the learning society)

Up to now, national policy in the VET sector has had a strong training focus, and lifelong learning objectives have been incidental.

The need for lifelong learning was not recognised in the Australian National Training Authority (ANTA) National Strategy for VET in 1994; and it was only recognised in an incidental way in the updated National Strategy of 1998 for the period 1998–2003, but not as a central objective or an aspect of the mission of the sector.

On the other hand, the national policy for the ACE sector endorsed by the Ministerial Council for Employment, Education, Training and Youth Affairs (MCEETYA) in 1997 places lifelong learning at the centre of the role of the sector.

The ACE National Policy is directed towards the creation of a learning society in Australia and affirms the increasing importance of:

- fostering a culture of learning in Australian society and organisations
- collaborating with all education and training sectors within a context of lifelong learning

The National Policy enunciates a vision of a learning society in the following terms:

The challenge for the education and training system in the face of accelerated change is to expand the systems capacity to develop curious and enquiring learners, critical thinkers, creative innovators, participating citizens, intelligent and competent workers and managers, and skillful, literate communicators in personal and public life—a Learning Society. (MCEETYA 1997, p.5)

This statement is consistent with the profiles of lifelong learners, learning organisations, and learning communities that we have included in this report. It includes attributes such as love of learning, curiosity, imagination and creativity, and civic responsibility that we emphasise in this report. These attributes underpin economic success as well as personal fulfilment and social coherence.

At present, the work of the VET sector is focussed on a fairly narrow segment of
this vision of lifelong learning in a learning society, and a key issue for VET is whether the work of the sector should contribute to all the attributes of lifelong learning in a learning society identified in the ACE National Policy. There is a compelling argument that VET, like all education sectors, should contribute across all these areas in the transition to a learning society. This assertion has fundamental implications for such areas as VET funding methods, the pedagogies adopted in VET institutions, and the relations of VET with the other education sectors and other stakeholders.

An unfinished agenda

At present there is no comprehensive national policy for lifelong learning, and separate national goals and visions exist in each of the sectors of education and training. This lack of coherence at a national level means that the crucial interdependencies required to build a learning society are not achieved sufficiently. In the case studies we observed the outcomes of this situation in wasted potential through insufficient common action directed at a shared vision. The requirements for vertical integration and horizontal integration discussed in chapter 1, have not yet been achieved in Australian society.

However, there have been a number of useful developments which will contribute to the journey towards a learning society. These include the role of key competencies in schools and VET, the increased focus on literacy objectives in schooling, the priority given to information literacy for all students, and policies to make VET more flexible, responsive to client needs, and accessible. The recent Review of Higher Education Financing and Policy includes a recognition of the significance of lifelong learning, and a vision of how higher education can contribute to a learning society.¹

In November 1994 the Minister for Employment, Education and Training requested that the National Board of Employment, Education and Training (NBEET) examine how the education and training sectors can contribute to the development of Lifelong Learning Skills and Attitudes.²

NBEET's report of November 1995, Lifelong learning: Key issues, recognised the significance of lifelong learning for all:

*Extending the concept of learning across the lifespan to all people in the community is critical.*

(NBEET 1996, p.19)

The NBEET report identified a spectrum of key issues: assessment, curriculum, delivery, teaching for lifelong learning, the social dimension, access and equity, recognition of prior learning, and impact of new technologies.

The Board reported that assessment had emerged as the central issue in regard to assisting the development of lifelong learners.³

This report also included a statement of the characteristics of lifelong learners which has much in common with the profile we include in chapter 5.⁴

While there has been progress in respect of a number of the issues identified by NBEET, there has been no comprehensive national response that addresses the full spectrum of issues.
We have taken account of the NBEET report in our assessment of the key issues and challenges which need to be addressed in progressing lifelong learning for all.

A further step in the evolution of national policy for lifelong learning occurred in 1998 in the Commonwealth Government's response to Beyond Cinderella: Towards a learning society, a 1997 report of the Senate Employment, Education and Training Reference Committee. This involved an 'unequivocal commitment to the concept of lifelong learning and the promotion of a learning society.'

A key issue that has emerged during the 1990s has been the relations of the VET and ACE sectors. The question of the VET/ACE interface raises fundamental issues concerning the relationship between vocational education and training and general education, that must be addressed in progressing the aspiration of lifelong learning for all in a learning society. These issues bear directly on equity 1) objectives in a cohesive, inclusive society, and 2) the pathways that provide learning opportunities for all in a complex and rapidly changing society.

The VET/ACE interface

The VET/ACE interface raises a broad spectrum of conceptual, funding, and practical issues. These issues have become more significant as the ACE sector has developed its national role and identity in the years since the landmark 1991 report of the Senate Employment, Education and Training Committee, Come in Cinderella: The emergence of Adult and Community Education, and as the pressures for lifelong learning have increased.

The Come in Cinderella report led to the emergence of a National Policy for Adult Community Education, which was endorsed by MEETYA in 1993 and then revised in 1997 as the current National Policy. While both the 1993 and 1997 policies recognised lifelong learning objectives, these were more fully integrated into the 1997 National Policy with its vision of a cohesive, inclusive learning society.

The unresolved conceptual and funding issues which lie at the VET/ACE interface received strong comment in the 1997 Senate Committee Report Beyond Cinderella: Towards the learning society:

> There is a conceptual inadequacy which haunts present policy and funding mechanisms in adult education and training. It is the insistence upon differentiating between educational programs on the grounds of their perceived or declared vocational orientation. This vocational/non-vocational divide fails to accommodate the rich harvest of various kinds of educational experiences that make up a learning society. It also muddies thinking, distorts values, and perpetuates a whole lot of unhelpful divisions—between private gain and social benefit; between the market and domestic spheres, between men's work and women's work; between short term interests and long term gains.

(Senate Standing Committee on Employment, Education and Training 1997, p.3)

This argument for a convergence of general and vocational education has been strongly argued by the OECD for some years. Artificial and increasingly meaningless distinctions between vocational and non-vocational are inconsistent with the spirit and requirements of a learning society in a globalised world,
driven by rampant technologies, and characterised by the blurring of many traditional boundaries.

There is consequently a need to reconceptualise the roles and relations of VET and ACE in a learning society. We have done this in this report, in terms of our concept of strategic partnerships that open up lifelong learning opportunities for all and provide a rich and diverse web of pathways for lifelong learning. Such strategic partnerships will exist in a range of contexts and levels, and are reflected in the vision of learning organisations, learning communities, and a learning society built into Part 2 of this report.

The funding implications of such a re-conceptualisation of roles will require careful consideration. We have not attempted to address funding issues in this report, although we recognise that funding is closely related to incentives and disincentives for lifelong learning—a point brought out strongly in our national consultations.

We have, however, identified a number of development priorities for progressing lifelong learning, which could be funded at a relatively modest cost. Such a developmental program would represent a useful initial step towards a comprehensive national policy and strategy for lifelong learning. Our proposals are consistent with recent proposals from the Australian Association for Adult and Community Education (now Adult Learning Australia) to the Commonwealth Government for Promoting Lifelong Learning in Australia.6

The challenge of lifelong learning for all will require dialogue and partnership at all levels. Our report is directed at identifying some of the key dimensions of such dialogue and partnership from the perspective of the VET and ACE sectors.

In doing this, we have recognised that the destinies of the VET and ACE sectors are inextricably linked, in the transition to a learning society. In this context, ACE is in reality the alter ego of VET.

Developments in other sectors

It is essential for VET to take account of developments in the other education sectors towards lifelong learning. In the case of higher education and schools, the most significant recent developments have been:

- the philosophy and proposals of the West Committee on higher education
- the current revisions of the national Common and Agreed Goals for Schooling
- development of a national policy for literacy

Higher education

The West Committee, in its report Learning for life, adopted a lifelong learning perspective in its concept of the role of higher education and in some of its principles.7

This perspective is reflected in:

- its vision for the sector
- its broad concept of the role of higher education
- its recognition that learning occurs in many contexts
- its notion of a coherent postsecondary education system
- its proposal for reform in funding arrangements towards student choice over four stages, with Stage Four based on a lifelong learning entitlement to post secondary education and training

The Australian government had not yet responded to the proposals of the West Committee when this report was finalised. The implications of the Government’s response for lifelong learning in the VET sector will require careful consideration.

Goals for schooling

MCEETYA decided in March 1997 to examine the common and agreed goals of schooling in Australia to ensure that they reflect current and possible future educational developments.

(MCEETYA 1998)

Accordingly, a National Goals Task Force was established to undertake this review, and in April 1998 MCEETYA agreed to release the national goals proposed by the Task Force for consultations and responses.

The original National Goals for schooling were endorsed by Commonwealth and State Ministers in 1989, and became known as the Hobart Declaration.

The draft revised goals recognise the case for lifelong learning in a number of ways:

- Schools will be learning communities of students, families, and teachers. They will be committed to pursuing excellence and equity, and in exploring and advancing individual, group, and societal development.
- The achievement of Australia’s common and agreed goals for schooling establishes the pathway for lifelong learning from the foundations established in the early years through to senior secondary, including vocational education and linking to employment and continuing education and training.
- Students, when they leave school, should have the qualities of self-confidence, optimism, high self-esteem and a commitment to personal excellence as a basis for their potential life roles as family, community, and workforce members
- have a foundation for, and positive attitudes towards, vocational education and training, further education and life-long learning.

These extracts from the draft National Goals points to a broader societal role for schools in a learning society, as well as providing the basis for lifelong learning by individuals. The foundations for lifelong learning identified in the draft goals have much in common with the views set out in our discussion paper which are discussed further in chapter 5, below.

If the draft National Goals for schooling are endorsed by MCEETYA along the lines of the draft proposal, the question arises as to whether the current national objectives for VET—identified by the ANTA Ministerial Council—should also be reviewed in order to achieve greater coherence between national goals for schooling, VET, and higher education. If Australia is to move towards a more seamless system of education and training, a framework of coherent national goals for the sectors of education and training will be a necessary first step.
The current national objectives for VET are:

- equipping Australians for the world of work
- enhancing mobility in the labour market
- achieving equitable outcomes in vocational education and training
- maximising the value of public vocational education and training expenditure

These goals, with their exclusive focus on the labour market and workplace, do not recognise the broader societal role of the VET sector in the transition to a learning society. The interdependences between economic, social, cultural, and educational objectives and strategies in the emerging socio-economic conditions of the 21st century is a central theme of this report, which has implications for the national objectives of the VET sector.

We comment further on this question in Part 4 of our report.

Notes

2. NBEET 1996.
3. Ibid., p.19.
4. Ibid., p.3.
4 International trends: An overview

One of the significant features of the past few years has been the growing interest that international agencies and governments in a number of countries have taken in lifelong learning.

This interest is reflected in the work of the OECD, UNESCO, the Council of Europe, and the agencies of the European Union, as well as in action taken by governments in countries such as Britain, the Netherlands, Ireland, Norway and Sweden to advance lifelong learning.

The reasons for this growing interest relates to the driving forces discussed in chapter 2, Drivers of change. While economic motives have been influential, a significant development has been a shift towards more integrated policies and strategies that combine social and cultural objectives with the economic rationale for lifelong learning. These shifts may be observed in the policies adopted by the European Union throughout the 1990s.

The emerging integrated approach to lifelong learning, which combines a mix of economic, social, educational, and cultural objectives, may also be observed in the Green Paper on lifelong learning released by the British government in February 1998.¹

The subtitle of the Green Paper, 'A Renaissance for a New Britain,' points to the character and thrusts of the Green Paper—for a Renaissance is a matter of spirit and values above all else, permeating all activities of a society to bring about change and resurgence.

The Papadopoulos report: An overview of international trends

In the context of burgeoning international interest in lifelong learning, we commissioned a member of the team, Dr George Papadopoulos, to prepare an overview of international trends with a focus on OECD countries.

Dr Papadopoulos, who resides in Paris, is a former OECD Deputy Director who had responsibilities for the education activities of the OECD.² In preparing this overview he had access to the most recent OECD and European Union material, so that the overview presents an up-to-date perspective on a complex pattern of change and development.

The Papadopoulos report is presented in Volume 2. The report covers:
- the basic characteristics of the current approach to lifelong learning strategies
- the perspectives of such international organisations as OECD, European Union, UNESCO, Council of Europe
- country experience: overall policies and specific program areas
- conclusions
Key points arising from the Overview of international trends are:

- The widespread acceptance of lifelong learning is a panacea for a diverse range of economic, social, cultural and political problems, combined with limited progress in developing comprehensive strategies to give effect to the concept.
- The strength of a range of barriers and vested interests tends to lead to an ad hoc approach rather than comprehensive, holistic policies and strategies.
- Shifts in the concept of lifelong learning over the past two decades reflect the changing socio-economic and political conditions:
  - The main driving force behind the current advocacy of lifelong learning are the economic-cum-technological imperatives and the needs arising from increasingly knowledge- and information-based economies.
  - While broader objectives such as social cohesion, cultural and democratic values are taken into account, they are subsumed as products of an economy revitalised through lifelong learning rather than as prime movers of the strategy.
- Whereas in the 1970s recurrent or permanent education meant essentially formal education, the concept of lifelong learning is now broader, and encompasses all formal and informal learning activities in a wide range of contexts.
- While the major international agencies examined (OECD, European Union, UNESCO, Council of Europe) have all taken a close interest in lifelong learning, there are differences of perspective and emphasis in the work of these bodies which reflect their mandates and the nature of their constituencies.
  - Shifts in the work of these agencies reflect changing socio-economic conditions (a comparison of the 1972 UNESCO Learning to be report and their 1996 Learning: The treasure within report is instructive— as is the comparison between the OECD's work on recurrent education in the 1980s and its current approach).
  - The 1996 OECD Ministers of Education meeting, which led to the Lifelong learning for all report, provides a blueprint for the implementation of strategies for lifelong learning.
- The activities of the European Union throughout the 1990s are particularly interesting in illustrating the shifts in the concept of lifelong learning, with a rising recognition of the strategic importance of lifelong learning for the broader social, employment, and economic objectives of the EU policies.
  - The links with the information society, internationalisation, scientific and technical progress, led to the 1997 White Paper, Towards a Europe of knowledge with guidelines for EU action in the areas of education, training, and youth for the period 2000-2006.
- The challenge of lifelong learning for all has led to general recognition (in the European Union, OECD and Britain, for example) of the need for a partnership approach within a framework of shared responsibilities involving all stakeholders.
  - Examples cited include the collaborative approach between central, regional and local government in the Netherlands to strengthen vocational and adult education through the development of strong and relatively independent regional education centres.
  - The University for Industry (Ufi) concept in Britain represents a different form of public/private partnership.
While country policies for lifelong learning show more diversity, and lack the coherence evident in the work of international agencies, there are certain broad themes that may be observed in the emerging strategies.

- These are promoting the widest possible participation in education and training for all age groups; developing partnerships and learning networks at central, regional and local levels; giving priority to those who are most in need; and meeting the needs of information and communication technologies in the effective use of these technologies in learning.
- Taken together, they reflect a quasi-universal prise de conscience on the part of national governments of the importance of lifelong learning as the ultimate objective for the longer term development of their education and training policies, always seen as essential to their social and economic prosperity.

Adult education and training has emerged as the most crucial and problematic area for the attainment of lifelong learning.

- It is here where the gaps between the current and desirable levels of provision are greatest, and where inequalities are most marked.

The spread of educational networking in a diversity of forms 'represents one of the most valuable manifestations of the lifelong learning movement.'

- The examples cited include the development of Learning Cities and transnational projects within the European Union.

The themes and issues reflected in the points summarised above are taken up in the chapters of this report that follow, and are taken into account in our conclusions and recommendations. There is much in the Australian situation, as we have observed it, that links to the international experience summarised by Dr Papadopoulos in his overview. A number of insights and lessons may be derived from this international experience that offers guidance in addressing the challenge of lifelong learning for all in a context of exponential change.

**British Government's Green Paper**

In addition to the strategic framework that the work of the OECD provides, we have taken a particular interest in the policies and strategies set out by the British government in its February 1998 Green Paper on lifelong learning, and discuss aspects of this approach in various chapters of this report. These aspects include promotion of understanding and demand for lifelong learning, equity issues and strategies, the role of technology, and the role of educational networking strategies such as the Learning City approach. We are most grateful for the assistance that the British Department for Education and Employment provided in the course of this study.

**Issues and bottlenecks**

The Overview of International Trends draws attention to a spectrum of issues and tensions that must be addressed in the journey towards a learning society. We found that these issues and tensions also arose in our consultations across Australia, and they are reflected in the case studies we undertook in a number of ways. These issues go to the heart of the question of the role of the VET sector in the transition to a learning society in Australia.
It is therefore useful to conclude the overview of international trends by citing the conclusions of Dr Papadopoulos from his 'Overview of international trends' (Volume 2 of this report):

This overview of national and international trends in lifelong learning points to a number of bottlenecks which have to be overcome if the rhetoric is to be converted, albeit gradually, into reality. Only a few of the more salient ones can be mentioned here.

Firstly, developing a culture of lifelong learning has to be motivated by more than the economic rationale, important as that undoubtedly is, which dominates policy thinking at present. Promotion and incentive policies directed at raising the levels of participation in lifelong learning across all groups in society need to focus principally upon influencing individuals' attitudes, within a vision of society which is not only prosperous but also humane, just and culturally rich. Lifelong learning needs to become alluring to the individual and a high satisfaction in itself. This cannot be achieved without radical changes to the overall ethos of foundation education, involving changes in the teaching-learning process at school level and the eradication of school failure. Overcoming resistance to such changes, including that by parents and teachers, remains a major obstacle. Without progress in this area, those who are deprived of initial education will remain those who do not benefit from continuing education opportunities.

Second, in spite of persistent efforts at bridging the differences between general education and vocational education and training, the gap remains. This again is a cultural phenomenon, in societies which attach higher value to theoretical knowledge as against technical and vocational skills and competence. Redressing this imbalance should be a principal objective, in the first instance, of those concerned with policies for vocational education and training.

Third, it is clear that the level of employer involvement in lifelong learning programmes remains inadequate, even though many countries do not currently have information about the total contribution that enterprises make. Underinvestment by firms is especially weak in the case of their contributions to general vocational education and training as distinct from what they pay for specific job-related training. The much-vaunted desirability of partnerships cannot be given reality unless employers are persuaded to increase their contribution in order to increase the collective economic gain from investment in lifelong learning.

This, finally, raises the question of the affordability of implementing policies for lifelong learning, particularly if the fight against social exclusion is taken seriously as a major objective of such policies. New resources are needed and these can be found only marginally through switching funds from other sectors of education or by applying efficiency and cost-reducing measures in the delivery of learning opportunities. The very use of information and communication technologies, essential to the spread of lifelong learning systems, will in itself involve significant additional resource outlays—at least in the initial phase. There is a need therefore to supplement public funding with increased contributions by individuals and employers if lifelong learning is to become a reality.

In these circumstances, implementing such policies can only be done on an incremental basis, and this is what is already happening in a number of countries. The challenge to this approach to policy is to ensure that such an incremental approach is planned and implemented within an agreed overall framework for the
longer-term realisation of policies for lifelong learning. The current debate on lifelong learning has at least opened up exciting new vistas for educational policy thinking. (pp.19-20)

Notes

1 Secretary of State for Education and Employment 1998a.
2 He is the author of the history of the ORCD's education activities in the period 1960–1990 (Papadopoulos 1994).
3 These reports are included in our References, and are cited in various places in this report.
5 Ibid., p.17.
6 Ibid., p.18.
Part 2: Contexts for learning

Part 2 of the report examines four key contexts in which learning occurs:

- the individual as a learner
- organisations and institutions
- communities including families
- society overall

We have applied learning principles in our discussion of each of these contexts for learning. In line with the general themes set out in part 1, we have taken a particular interest in the interdependences that exist between these contexts for learning which provide opportunities for holistic strategies, linking these contexts in synergistic ways so that a learning culture is built through partnership action.

Issues identified in these chapters, and in the case studies of Volume 2, are taken up in the challenges discussed in Part 3. While there is some discussion of the institutional context for learning in chapter 6, this is discussed more fully in chapter 14.

It has been well said that the most effective way to encourage personal investment in human capital is to empower individuals. The chapters that follow examine ways in which empowerment strategies implemented through such means as learning organisations and learning communities provide incentives for individuals to invest in their on-going learning and development, and promote support for this process. Through such action Australia can foster a learning culture appropriate to the Learning Age.
5 Encouraging and supporting learners

The truth is that we have in the past underestimated the human potential for learning, and still continue to do so. (Christopher Ball)

Above all, a vision of a learning culture will envisage learning as a normal, accessible, productive (if demanding) feature of everyday life for all people, throughout their lives. (Fryer 1997)

The challenge

The goal of achieving 'lifelong learning opportunities for all,' or what has been described as a 'learning society,' will require a learning revolution in Australia.1 The realisation of a learning society will require active promotion to foster understanding and demand for learning in all sections of the community. At the same time, barriers to lifelong learning will need to be identified and addressed through appropriate strategies so that non-participants are brought into lifelong learning.

We have drawn these conclusions from our analysis of literature, action taken in other countries, the case studies, and our consultations across Australia.

Central to this necessary action will be policies that encourage individuals to be lifelong learners and that support their aspirations. Motivating and empowering individuals to be lifelong learners is perhaps the central challenge in policies for lifelong learning.

For this reason we have concluded that there must be systematic demand side measures which motivate and support individuals in accessing learning opportunities throughout life. We comment on this need in chapter 9.

A demand side orientation raises a spectrum of issues relating to the nexus between opportunity, capacity, and choice which were touched on in our discussion paper,2 and which have attracted attention in other sectors of public policy.3 In brief, it is apparent that demand side approaches to individual lifelong learning fall under two headings: developing the capability for lifelong learning, and supporting lifelong learners. Each of these is dealt with in the sections that follow. Before doing so, however, it is necessary to explore the nature and extent of participation in learning.

Participation in learning throughout life

Any comprehensive approach to lifelong learning would need to extend from early childhood through to advanced old age. Sometimes this chronological continuum is referred to as 'womb to tomb,' or 'cradle to grave.' Clearly a concern with the education of young children falls outside the normal purview
of VET and, in any case, Australia already has very high levels of participation in formal education. Likewise, participation in university level studies, although an important component of a lifelong learning program, lies beyond the reach of VET.

Accordingly, the main concern of VET is with participation in vocational education and training, either within the workplace or in colleges and institutes, or else in general community-based adult and continuing education. The need to obtain quality data on current participants in adult education and training has been recognised in Australia, Britain and elsewhere. The absence of good base data on adult participation and attitudes to education, training, and learning is seen as impeding the development of appropriate policy on lifelong learning.

In Australia, quality information has not been available until recently. However, in 1995 the Australian Bureau of Statistics (ABS), through its Population Survey Monitor and Associated Focus Group Program, collected survey data for both DEETYA and AAACE (now Adult Learning Australia).

Echoing the results of many previous studies in Australia and elsewhere, the ABS survey of ‘Adult attitudes to and participation in Further Education and Training’ emphasised the vital importance of socio-economic status, with participation being significantly influenced by age, occupation, previous education and qualifications held.

An extensive National adult learning survey undertaken in Britain in 1997 for the Department for Education and Employment in 1997 showed similar findings. However, in the British survey gender was found to be a more significant influence than appeared in the Australian study, with significant differences between male and female participation in vocational and non-vocational adult education and training.

The ABS survey showed that the lowest level of participation was with people with the following characteristics:

Unemployed persons, those not in the labour force, employed as labourers or operatives/drivers, or holding no post-school qualifications. (ABS 1996)

Data obtained by AAACE added to these categories, older adults, some ethnic groups, some groups of women, ex-offenders, people with learning difficulties/disabilities, and those with literacy/numeracy difficulties.

British research evidence further delineates the profile of non-participants:

Under-participating groups share in common a lack of awareness of their learning needs, a lack of confidence, and a lack of access to provision and guidance about what might be best suited to their aspirations and needs.

(Tuckett, A, ‘Reaching Out: Barriers to participate,’ in RSA 1996)

There are grounds for believing, from the evidence of equity projects and other sources, that this profile also holds true for Australia. This analysis points to key barriers to be addressed in encouraging and supporting learners.

The ABS study also showed that personal interest in a course was the single most important reason for participation in further education and training, with the next most important reason being a desire to update work related skills.
The significance of intrinsic motivation for participation is important, and suggests that intrinsic values may be more important in participation decisions than external factors such as promotion, pay rises, and employer demands.

Table 1: Attitudes to learning, training, and education in 1998
MORI State of the nation survey: Attitudes to learning

<table>
<thead>
<tr>
<th>Learning</th>
<th>Training</th>
<th>Education</th>
<th>Not stated</th>
</tr>
</thead>
<tbody>
<tr>
<td>Achievement</td>
<td>37%</td>
<td>27%</td>
<td>34%</td>
</tr>
<tr>
<td>Being taught</td>
<td>31%</td>
<td>19%</td>
<td>48%</td>
</tr>
<tr>
<td>School</td>
<td>26%</td>
<td>3%</td>
<td>71%</td>
</tr>
<tr>
<td>Qualifications</td>
<td>12%</td>
<td>37%</td>
<td>49%</td>
</tr>
<tr>
<td>Gaining new skills</td>
<td>23%</td>
<td>72%</td>
<td>3%</td>
</tr>
<tr>
<td>Hard work</td>
<td>36%</td>
<td>41%</td>
<td>18%</td>
</tr>
<tr>
<td>Boring</td>
<td>24%</td>
<td>18%</td>
<td>31%</td>
</tr>
<tr>
<td>Discovering</td>
<td>70%</td>
<td>7%</td>
<td>19%</td>
</tr>
<tr>
<td>Enjoyment</td>
<td>62%</td>
<td>21%</td>
<td>11%</td>
</tr>
<tr>
<td>Computers</td>
<td>30%</td>
<td>47%</td>
<td>19%</td>
</tr>
<tr>
<td>Exchanging ideas/information</td>
<td>54%</td>
<td>16%</td>
<td>27%</td>
</tr>
<tr>
<td>with others</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Finding out more</td>
<td>67%</td>
<td>8%</td>
<td>21%</td>
</tr>
<tr>
<td>Studying</td>
<td>33%</td>
<td>7%</td>
<td>57%</td>
</tr>
<tr>
<td>TV/video</td>
<td>60%</td>
<td>9%</td>
<td>24%</td>
</tr>
<tr>
<td>Personal growth</td>
<td>52%</td>
<td>19%</td>
<td>23%</td>
</tr>
<tr>
<td>Base: All</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>


Supporting evidence in an Australian context for this finding on intrinsic motivation for participation comes from a study by Liz Harris and Simone Volet on developing a learning culture in the workplace. Their conclusion from the responses of training managers and focus group participants was that financial incentives rarely figured, and that the main motivation came from personal satisfaction, fulfilment, and growth. These were seen as the primary incentives for learning in the workplace.

Surveys undertaken in Britain in 1996 and 1998 on attitudes to learning, for the National Campaign for Learning, support the general tenor of the ABS findings, but also reveal some interesting and significant insights into attitudes towards learning, training, and education.

The high association of learning with ‘discovery,’ ‘enjoyment,’ ‘finding out more,’ and ‘exchanging ideas/information’ suggests the value of a learning approach for fostering these attitudes. On the other hand, the low level of association between both training and education with these attributes—which are fundamental in a learning society—points to weaknesses in the strategies and methods adopted in these sectors. Similar data on Australian attitudes to learning would be valuable in guiding policy for lifelong learning.

The 1998 British Attitudes to Learning Survey also showed that
- the influence of employers/workplace, followed by friends, were the major influences upon learning decisions
- a higher proportion of adults (77%) would prefer to work for an employer who provides time, money, and support for training, than one who gives big salary increases but little opportunity for training
adults preferred to learn in the home (57%), the workplace (43%) and in libraries (36%), ahead of colleges and universities (29%).

A summary of key findings from the 1998 *Attitudes to learning* survey is given in exhibit 3. These are significant findings in terms of guiding policy for lifelong learning, and there are grounds for believing that similar attitudes exist in Australia.

The British findings point to the great significance of the workplace and home as environments for learning, and confirm the significance of intrinsic satisfaction as a motivation for learning.

### Exhibit 3: Attitudes to learning

<table>
<thead>
<tr>
<th>Influences on learning</th>
<th>Participation in learning is influenced by age, employment status, level of highest qualification and social class.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>The majority of adults would like to take part in some form of learning in the next twelve months.</td>
</tr>
<tr>
<td>Why we learn</td>
<td>Improving the quality of one’s life, and attempting to better oneself, are the main reasons for valuing learning as personally important.</td>
</tr>
<tr>
<td></td>
<td>Young people are likely to cite education and job related reasons for learning.</td>
</tr>
<tr>
<td></td>
<td>Most adults perceive the benefits of learning in terms of personal development and helping them to achieve what they want out of life, rather than specifically to improve their job prospects or performance at work.</td>
</tr>
<tr>
<td></td>
<td>The main influences on deciding to start learning are employer/work colleagues 34%, friends 25%, parents/relatives 20%.</td>
</tr>
<tr>
<td></td>
<td>More than three quarters of people (77%) would prefer to work for an employer who supports their training than one who pays high salaries but provides few opportunities for training.</td>
</tr>
<tr>
<td>Enjoyment of Learning</td>
<td>93% of adults say they enjoy learning new things.</td>
</tr>
<tr>
<td>Barriers to Learning</td>
<td>Barriers to learning for young people include poor teaching (77%), feeling unhappy (74%) and teachers who do not understand how children learn.</td>
</tr>
<tr>
<td></td>
<td>The perceived emphasis placed upon obtaining qualifications is a barrier to some people's involvement in learning (37%).</td>
</tr>
<tr>
<td>Where we learn</td>
<td>Adults feel that they learn most in the home (57%), at work (47%), and in libraries (36%).</td>
</tr>
<tr>
<td></td>
<td>Colleges and universities rate below these locations (29%).</td>
</tr>
</tbody>
</table>

Developing the capability for lifelong learning

From the foregoing, it is apparent that participation in adult learning—whether for vocational purposes or for personal enrichment—depends on a complex mixture of attitudes, personal attributes, and circumstances. While some of these variables lie beyond the reach of conventional education, especially in adulthood, it is evident that there is considerable potential for VET to help in developing lifelong learners in two principal ways: by increasing their capability for learning and by enhancing their motivation.

Increasing the capability for learning

In our discussion paper, we raised the question of what is involved in a capability for lifelong learning. Our presentation included two elements:

- components of lifelong learning capability (figure 2)
- a profile of a lifelong learner (exhibit 4)

We found in our consultations no significant dissent from either our analysis of the components of lifelong learning capability, or the attributes included in the profile of a lifelong learner. Consultations with people involved in the ACE sector and in equity initiatives, in particular, affirmed the centrality of the attributes included in our model that influence motivation and desire for learning, and the personal fulfilment (being) attributes that drive a lifelong learning quest.

Both the model of lifelong learning capability, and the profile of the lifelong learner have major implications for VET providers. The work of VET should be oriented in such a way as to foster attributes such as curiosity, love of learning, 'helicopter' perspectives, learning-to-learn skills, interpersonal effectiveness, and the application of information skills so that the graduates of VET institutions are effective lifelong learners. We comment further on this issue in chapter 14.

While the profile of the lifelong learner given in exhibit 4 may appear overly idealistic, there is mounting evidence around the world that a revolution in aspirations, and achievement, is required by the emerging conditions of the Learning Age. This is central to maintaining employability. This question is discussed further below in connection with enhancing motivation to learn.

There is also growing evidence that operative level workers can think conceptually and symbolically—as is often required by new technologies and working methods in industry—is when their learning capability is carefully nurtured.

For example, studies by the Institute on Education and the Economy at Columbia University have shown that textile workers have to think symbolically, and understand complicated manuals and diagrams, when they are required to fix machines equipped with microprocessors and other electronic components. There is no doubt that this requirement will increase, so that conceptual understanding—'an inquiring mind and curiosity'—and the other attributes of the lifelong learner set out in exhibit 4, should be central to the work of VET. This is not utopian, but is a growing real life requirement.
Enhancing the motivation to learn

Turning to the issue of enhanced motivation: perhaps the most difficult group to animate are those who choose, for whatever reason, not to participate in any recognisable forms of adult learning. While the decision not to participate is their prerogative, there is considerable evidence to show that a capability and desire for lifelong learning has much to offer individuals, and indeed to society overall. The OECD has expressed the gifts of lifelong learning in the following terms:

For the individual, lifelong learning emphasises creativity, initiative and responsiveness attributes which contribute to self-fulfilment, higher earnings, and employment, and to innovation and productivity.

(OECD 1996, p.15)

In developing a learning society it is essential to raise the level of aspiration of individuals, organisations, and communities, so that a learning/achievement cycle raises aspirations and achievements in an on-going process. This point has been observed by Sir Christopher Ball, Director of Learning at the British Royal Society for the Arts:

The truth is that we have in the past underestimated the human potential for learning, and still continue to do so.

(RSA 1997)

Encouraging and supporting learners is central to realising the human potential for learning in Australian society.

The challenge for society is to develop and support motivational pathways, so that all citizens can realise the benefits of learning. In the case of non-participants, the hardest challenge is to find an initial experience that motivates these people and encourages them to take the first steps on the path to lifelong learning. In consultations, the need for a diverse web of pathways that linked the community, education, and work was frequently pointed out. We endorse this need and recognise the key role that community based providers can often play in encouraging non-participants to take the initial steps towards lifelong participation in learning.

Supporting lifelong learning

Clearly, it is imperative for people to have the attributes that enable lifelong learning, as well as the motivation to participate as appropriate. However, other barriers might stand in the way of their involvement; these include lack of information, lack of clear pathways or recognition of prior learning, and lack of equitable access to learning opportunities. VET potentially has a major role in addressing all three.
Exhibit 4: Profile of the lifelong learner

An inquiring mind and curiosity
• Has a sense of curiosity and asks questions
• Has a love of learning and discovery
• Has reflective habits
• Can apply strategies to enhance creative resourcefulness

Helicopter vision
• Has a sense of the interconnectedness of things
• Is able to apply systems perspectives and ‘see the big picture’
• Has a capacity for strategic thinking
• Has a vision that goes beyond own job or field of study

A repertoire of learning skills
• Has learning to learn skills
• Has knowledge of own strengths, weaknesses and preferred learning styles
• Has a range of strategies for learning in various contexts
• Is able to learn from others in teams
• Understands different kinds of learning

A commitment to personal mastery and on-going development
• Has motivation and desire for learning throughout life, and confidence in own learning capability
• Has a commitment to on-going personal and career development
• Has self-esteem and a positive concept of self as capable and autonomous
• Has the capacity to deal with change

Interpersonal effectiveness
• Is able to learn from others in teams
• Is able to give and receive feedback in team learning situations
• Has a group orientation and can contribute to team learning
• Has cultural understanding and can learn in situations involving cultural diversity in Australia and overseas

Information literacy
• Has an ability to locate, evaluate, manage, and use information in a range of contexts
• Can use modern information technologies for these purposes
• Has a good sense of knowledge acquisition and generation, and can contribute to turning a workplace learning into shared knowledge

Source: This profile has been adapted from a profile devised by Philip Candy, Gay Crebert and Jane O’Leary and was included in their report Developing Lifelong Learning through Undergraduate Education (NBEET, 1994).
Figure 2: Lifelong learning capability

**Information and guidance**

In addition to strategies that engender confidence, self-esteem and a desire for learning, marginal groups of learners require other support. Perhaps the most important of these is quality information and guidance. This is a key objective in the current British reforms, with the Ufi and its associated national network of learning centres having a key role in meeting this need.8

This need has been recognised by the British government, and is one of the priorities of its Green Paper on lifelong learning and of its current initiatives. It has also been recognised by Adult Learning Australia in a recent submission to the Commonwealth government and by the House of Representatives Standing Committee on Employment, Education and Training in its 1998 report on TAFE, *Today's training: Tomorrow's skills*. This report identified, as a major weakness, the absence of a national guidance program:

*Despite the enormous expenditure on post-secondary education Australia has no consistent national guidance program to help people understand and navigate the system.*

(House of Representatives Standing Committee on Employment, Education and Training 1998, p.58)

While there have been recent initiatives in this area, the House of Representatives Committee concluded that they did not go far enough in reaching those most in need of careers guidance:

*Existing career guidance arrangements for school students and the wider community are lacking, in terms of both the resourcing of career guidance services and the range of information available.*

(Ibid., p.61)

We agree with this conclusion, and see this as a priority area for development in fostering lifelong learning in Australia. Lifelong learning requires quality information and guidance services if individuals are to be encouraged to continue learning through the whole of life. For this reason, we support the Adult Learning Australia proposal for a systematic research and development study into the creation of a nationally consistent careers advisory service.
Recommendation 15
a  The conclusions of this study support the need for a comprehensive, nationally consistent careers information guidance and counselling service as a priority requirement in fostering lifelong learning in Australia; thus we support the proposal of Adult Learning Australia for a systematic study into the nature and scope of such a service.

b  This study should give priority to the needs of non-participants in learning.

Pathways and recognition of prior learning
Readily available information is one thing; the existence of clearly delineated personal learning pathways is another. Many other countries, including New Zealand, the United Kingdom and South Africa, have invested heavily in developing frameworks and mechanisms that allow learners both to gain recognition for what they have learned elsewhere (credentialed and uncredentialled) and to progress seamlessly from one level of education or type of program to another.

Undoubtedly, there can be serious difficulties with qualification frameworks that attempt to reduce all learning outcomes to measurable statements, and which seek to give formal accreditation to informal life experiences—thus substituting the spectre of ‘lifelong schooling’ for ‘lifelong learning.’ Nevertheless, articulated pathways and accessible and transparent methods of gaining credit for learning obtained elsewhere are vital if we are to have a learning society—and there is a central role for VET in the realisation of such a vision.

Equitable access to learning opportunities
While the motivation for learning, discussed earlier in this chapter, is fundamentally intrinsic, incentives may be required to overcome negative attitudes towards learning that may exist because of unfortunate experiences in formal education, lack of confidence and self-esteem, and other barriers. A spectrum of strategies is likely to be required, including:

- financial incentives (for example, Britain’s ‘individual learning accounts’)
- support and incentives provided by social groups (families, employers, communities and other organisations)
- information and guidance

Such a multi-pronged approach is being adopted in Britain with the government’s Green Paper and other initiatives to motivate and encourage individuals to invest in their own learning on a whole-of-life basis, and to remove the barriers to this occurring.

These initiatives include:
- a scheme of individual learning accounts, designed as a catalyst for a learning revolution in British society
- the role of the UFl in providing ready information and support through its national network of learning centres
- changes in student funding to assist the most needy
- an active national promotion of learning through the role of bodies such as The Campaign for Learning
Revolutions take time to accomplish, but this connected battery of initiatives appears to offer a range of incentives for learning that will, over time, lead to a nation of lifelong learners. The recent set of proposals from AAACE to the Commonwealth government for promoting lifelong learning in Australia, while more modest, offers a useful starting point in providing incentives for individuals to invest in their own learning.

In implementing a range of initiatives such as these, it is vital that existing patterns of disadvantage are not reinforced, and that new forms of disadvantage are not inadvertently introduced. Equity issues are therefore central to the challenge of lifelong learning, so that questions of who participates and who does not, need to be addressed in the broad context of the democratic aspiration for a fair, inclusive society.

A recent review of ANTA equity proposals demonstrated the value of community based strategies which provided encouragement and support for non-participants in the initial difficult steps. For individuals and groups where multiple disadvantages exist, investment in resources to assist the initial difficult steps is a worthwhile investment. Some equity projects funded by ANTA illustrated how motivational pathways can be created to assist the most disadvantaged groups and individuals to gain confidence, self-esteem, positive social attitudes and a desire for learning. We take up equity issues in chapter 11 of this report.

Research needs

The centrality of the need to motivate and support individuals to develop as lifelong learners raises a broad spectrum of issues about which research is needed to guide policy. Whereas there has been substantial British research since the early 1990s—much of it sponsored by the British Employment Department and its successor department, on subjects such as individual, employer, and provider attitudes to learning and participation patterns —there is far less Australian research on these subjects.

The need exists to develop a research base on individual motivation for lifelong learning, barriers to participation, incentives and disincentives, and the experience of groups disadvantaged in accessing lifelong learning opportunities.

This will require:
- surveys of participation in lifelong learning and of attitudes towards learning
- in-depth studies of attitudes and motivation in non-participating groups including literature reviews

As recommended above, the initial priority lies in the need to develop baseline data on participation and attitudes.
There is a need for further Australian surveys of adult learning—a need strongly supported by Adult Learning Australia. There would be value in some of the questions from the British *Attitudes to learning* surveys being built into future Australian surveys, in order to probe further the nature of participation, barriers, and attitudes towards learning in a range of contexts and with a range of methods.

**Recommendation 17**

a. That regular national surveys of participation in adult learning be undertaken in order to guide policy for lifelong learning and monitor progress.

b. These surveys should be broadened so as to explore community attitudes to learning along the lines of the British MORI surveys sponsored by The Campaign for Learning.

In addition to this priority, there would be value in the following studies as early priorities:

* a review of British literature on motivation and overall attitudes towards lifelong learning, in order to identify key issues for Australian research
* a review of the literature on adult learning as a basis for the development of effective strategies to foster lifelong learning in the range of contexts identified in this report

This is one area that NCVER might address as a follow-up on this report, with a view to the production of an omnibus volume of research on lifelong learning along the lines of their 1998 *Readings in Australian Vocational Education and Training research*. There would also be substantial value in on-going monitoring and promotion, leading to a regular national State of learning report. This could be considered as a national millennium project for the year 2000, to develop baseline data and benchmarks for progress in the 21st Century towards Australia as a learning society.

**Recommendation 18**

That the National Centre for Vocational Education Research, in association with other stakeholders, note the research needs identified in this report arising from the transition towards lifelong learning in Australia, and give consideration to ways of addressing these needs in national research action.

**Conclusions**

In addition to the need for further research, the analysis of this chapter points to three key issues that need to be addressed in developing policy and strategies for lifelong learning. These are:

1. how to promote understanding and demand for lifelong learning
2. how to raise the aspirations of under-achievers generally
3. how to address the equity challenge of lifelong learning in a context marked by growing socio-economic polarisation between the ‘learning rich’ (or employable) and those who are ‘learning poor’
These challenges, which need to be seen in the context and conditions dealt with in chapter 2, above, are discussed further in Part 3 of this report. The nature of these challenges also points to the key role of demand side policies in the pathway to a Learning Society. As Sir Christopher Ball points out, achieving the necessary and desirable changes on the demand side will prove even more difficult than supply side reform. However, this is a challenge which it is vital for us to take up.

Our research and consultations suggest the need for action to foster demand for lifelong learning in individuals and groups who currently are not lifelong learners, across the following areas:

- active promotion so that community awareness and understanding of the need for lifelong learning leads to a general community demand
- improved information on barriers through a greater research effort including adult learning surveys
- creating incentives for individuals to invest in their learning throughout life
- orienting equity policies and strategies to lifelong learning objectives through a learning approach to equity
- providing improved access to information and guidance to assist individuals, families, and communities
- supporting individuals in their learning aspirations through measures to strengthen the support role of families, organisations, and communities

Action across each of these areas has been built into the British government’s Green Paper, The Learning Age, and associated action which has been taken over some years, and most of these areas have been built into the AAACE proposals for lifelong learning.

Lifelong learning requires a careful delineation of roles and responsibilities under partnership arrangements associating all stakeholders. Stakeholders include individuals, families, communities, employers, unions and governments. The roles and responsibilities of all stakeholders need to be clarified and delineated.

At the centre of these roles is individual responsibility for lifelong learning and development, so that qualities of self-reliance and autonomy need to be actively fostered by the education and training system. However, so that choices are real, barriers to lifelong learning need to be actively addressed through equity policies if the vision of a democratic, inclusive society, with opportunities for all, is to be realised in the emerging conditions of the 21st century.
Notes


2 Kearns 1998b, pp.8–12.

3 Kearns & Grant 1998.


5 Harris & Volet 1997, pp.50–51.


8 Secretary of State for Education and Employment 1998a, pp.18–23.

9 Ibid., pp.27–29.

10 Ibid., pp.18–21.

11 Ibid., pp.29–31.

12 RSA 1996, p.3.
The learning organisation provides a home for new thinking about old educational needs, but it goes beyond that as well because it links individual learning with organisational learning. (Watkins & Marsick 1993)

The learning organisation will be the standard philosophy for many Australian enterprises and a major way they cope with change and turbulence. (Industry Task Force in Leadership and Management, Karpin Report 1995)

Researchers are exploring the intricacies of learning in the workplace and the complex interplay among individual, group, and organisational learning. (Sorohan 1993)

The workplace is one of the key contexts for learning throughout life. The way the workplace functions in its learning role provides incentives or disincentives for learning by individuals. Fostering a lifelong learning culture in Australian society depends to a considerable extent upon whether the workplace becomes an environment that stimulates, encourages, and rewards on-going learning and development to the mutual benefit of employers, staff, and society.

The integration of work and learning, so that the workplace becomes a catalyst for learning, depends upon a range of factors such as the nature of jobs, organisation and management, and the values that underpin the operations of enterprises.

While the increased international recognition of the need for on-going learning and continuous improvement in the workplace has led to the emergence of new concepts, such as the learning organisation and high performance workplace, our consultations and the available Australian literature suggested that these concepts have had overall less impact in Australia than the case in North America and Europe—although a range of examples exist of learning strategies applied in workplaces, mainly in manufacturing industry, in association with workplace changes.¹

The reasons for this situation are complex and beyond the scope of this study. Partial explanations may be found in the Karpin Report, which analyses the strengths and weaknesses of Australian managers, the fact that relatively few Australian firms are yet fully globalised in their operations, and the small size of most Australian businesses. There has also been little systematic promotion of the learning organisation concept in Australia to date, and there is an absence of professional networks in this field that are active in Europe and America.² The consequence is that we found few signs of learning organisation development in industry or in VET institutions and the Australian literature is sparse.

¹ Building learning organisations

² Building learning organisations
While, overall, the learning organisation approach appears not to have had a significant impact on Australian enterprises, examples of good practice do exist, such as those included in a collection of case studies by Harris & Volet, 1997. These cases show learning organisation principles being applied in a number of contexts. However, there is a need for many more case studies of learning organisation development in contexts such as the small business sector, VET institutions, and firms in rural and regional contexts.

The emergence of the concept of a learning organisation has focused attention on the kinds of learning that occur in the workplace and the relationship of these forms of learning to performance outcomes. Learning organisations are one of the key building blocks of a learning society, and their relative absence impedes the achievement of such a society.

**What is a learning organisation?**

While learning organisations have been defined in a number of ways, there are common elements in these definitions.

Typical definitions are:

*Organisations where people continually expand their capacity to create the results they truly desire, where new and expansive patterns of thinking are nurtured, where collective aspiration is set free, and where people are continually learning how to learn together.* (Senge 1990, p.3)

*A Learning Company is an organisation that facilitates the learning of all its members and continually transforms itself.* (Pedler et al. 1991, p.1)

These definitions share the common feature that on-going learning is facilitated and the organisation has the capability to transform itself.

**Characteristics of learning organisations**

Learning organisations usually have the following characteristics:

- Work and learning is integrated so that an educative workplace is created which is supportive of on-going learning.
- The organisation is adaptive and able to respond to changing conditions.
- Team learning is a common feature.
- Learning is valued and actively fostered.
- The organisation is well connected to its environment and applies systems thinking.
- Staff are empowered and there are active strategies to foster personal mastery.
- Learning is linked to knowledge generation and management.
- There is a common vision that bonds staff.

These characteristics may be applied in a range of ways, and a diversity of strategies exist for learning organisation development.
The four levels of learning

All approaches to learning organisation development recognise that learning occurs at a number of levels in a learning organisation. Watkins and Marsick (1993) identify these levels as individual learning, team and organisation learning, and societal. There are interdependencies between these levels so that effective learning fosters individual learning and contributes to the learning culture and outcomes of the organisation. The linkages between learning organisations and the community contribute to building a learning society.

A summary of learning at these four levels developed by Watkins and Marsick is given in table 1.

Building a learning organisation

This is no single best strategy to build a learning organisation. The most appropriate strategy will depend on the particular situation of the organisation and its environment.

Marquardt (1996) suggests a systems approach designed around five key systems in an organisation: people, learning, organisation, technology, and knowledge. This approach has been adopted by a number of major corporations.

Watkins and Marsick suggest that the design of a learning organisation depends on six action imperatives, each of which complements the other:

- create continuous learning opportunities
- promote inquiry and dialogue
- encourage collaboration and team learning
- establish systems to capture and start learning
- empower people towards a collective vision
- connect the organisation to its environment

The differences in approach adopted to building a learning organisation are illustrated in table 2, which is a comparison of strategies adopted by 18 American and European enterprises classified in terms of ‘four lenses’ for viewing a learning organisation.

Cultural lens

- Changing the culture and its underlying cognitive and affective determinants to influence individual thinking and behaviour and the behavioural social worlds.
- Traditional norms are challenged, a long term perspective is adopted, diversity if valued, and there is open feedback.
Table 2: Summary of learning at four levels in the learning organisation

<table>
<thead>
<tr>
<th>Nature of learning</th>
<th>Learning facilitators</th>
<th>Learning threats</th>
<th>Learning outcomes (seven C's)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Individual</td>
<td>Change in behaviour, knowledge, motivation, capacity to learn</td>
<td>Learning becomes continuous and developmental</td>
<td>Learned helplessness; lack of inquiry skills</td>
</tr>
<tr>
<td>Team</td>
<td>Change in a group’s capacity for collaborative, synergistic work</td>
<td>Groups reframe, experiment, seek, diversity and exchange insights</td>
<td>Compartmentalisation; rewards for individualism over teamwork</td>
</tr>
<tr>
<td>Organisation</td>
<td>Change in organisational capacity for innovation and new knowledge</td>
<td>Employees are empowered and structures decentralised; systems embed learning results</td>
<td>Structural rigidity; tunnel vision; truncated learning</td>
</tr>
<tr>
<td>Societal</td>
<td>Change in overall capacity of community and society</td>
<td>Total Quality Management initiatives are integrated with quality of work life initiatives</td>
<td>Fragmentation; tunnel vision</td>
</tr>
</tbody>
</table>


A comparison of a learning organisation and traditional organisation made by Watkins and Marsick is given in table 3. This table shows this comparison at the four levels of learning discussed in table 2.
Table 3: What will be different in the learning organisation?

<table>
<thead>
<tr>
<th>From</th>
<th>To</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Individual</strong></td>
<td></td>
</tr>
<tr>
<td>Learning that is canned, sporadic, and faddish</td>
<td>Learning that is continuous, strategically tied to future organisational needs</td>
</tr>
<tr>
<td>Learning that is not coherently integrated or sequential</td>
<td>Learning that is developmental</td>
</tr>
<tr>
<td>Learned helplessness</td>
<td>Personal mastery, learning to challenge assumptions and to inquire</td>
</tr>
<tr>
<td><strong>Team</strong></td>
<td></td>
</tr>
<tr>
<td>Learning that is focused on task accomplishment with no attention to process</td>
<td>Learning that is focused on group development and on building collaborative skills</td>
</tr>
<tr>
<td>Rewards for individuals, not teams</td>
<td>Reward for teams, whole divisions</td>
</tr>
<tr>
<td>Compartmentalisation</td>
<td>Cross-functional, self-directed work teams</td>
</tr>
<tr>
<td><strong>Organisational</strong></td>
<td></td>
</tr>
<tr>
<td>Learning that is superficial and unconnected to previous skills, truncated learning</td>
<td>Learning that builds over time on previous skill attainment</td>
</tr>
<tr>
<td>Learning through structural reorganisations without regard to learning barriers created; structural rigidity</td>
<td>Creation of flexible structures to enhance learning for everyone</td>
</tr>
<tr>
<td><strong>Societal</strong></td>
<td></td>
</tr>
<tr>
<td>Unawareness of impact on society and policies, tunnel vision</td>
<td>Acknowledgment of interdependence and work to improve society generally</td>
</tr>
<tr>
<td>Attempts to control societal influence</td>
<td>Constant scanning and projecting of future trends while working to build a desirable future</td>
</tr>
</tbody>
</table>


Each of these action imperatives relates directly to the general approach to lifelong learning discussed in this report, and illustrates the interdependence between the levels and contexts of learning. These action imperatives, which relate to three levels of learning, are illustrated in figure 3.

**Figure 3: Learning organisation action imperatives**

![Diagram of learning organisation action imperatives](source)

A further classification of key dimensions of a learning organisation is given in table 4 in relation to strategies adopted by a number of American and international firms. This classification involves four perspectives.

- **Cultural lens**
  - Changing the culture of an organisation so as to foster continuous learning and improvement and responsiveness to change.

- **Structural lens**
  - Changing the overall system of relationships among people and the way in which they organise for work away from rigid constraints and towards open systems.
  - Dialogue and collaborative learning are encouraged.

- **Experiential lens**
  - The creation and accumulation of collective knowledge and skills that build organisational capacity for change.
  - Learning is integrated will work with reflection valued.

- **Informating lens**
  - Changing the way information is meaningfully created and used to influence long-term capacity for change.
  - Systems are used to collect and disseminate learning.

This classification, which was prepared for the Learning Organisation Network of the American Society for Training and Development, is useful in pointing to the key dimensions of learning organisation development.

**Empowering staff and motivating learning**

A key outcome of the learning organisation approach is the effect of empowering staff and motivating their learning. Studies around the world have shown how outcomes can improve both organisational learning and performance, and the motivation of individuals for learning.7

**Meeting the learning needs of the small business sector**

A particular issue exists in respect of meeting the learning needs of the small business sector. The absence of a training culture in most small firms has been well documented in research and a recent review of training and learning in small business by Laurie Field concluded that the current training approach in the small business sector was a failed model.8

A recent French study of training in very small enterprises (VSE) reached similar conclusions to Field:

*Underlying the managers’ rejection of training is above all the rejection of a form of learning proper to the school, which does not correspond to the ways knowledge is transmitted in the VSEs.*

(CEREQ 1998, p.4)

When it comes to improving skills 'they prefer to draw on interpersonal networks and interpersonal relations because the company head seeks advice through dialogue.'9 These conclusions point to the potential of learning networks in the small business sector.

The conclusions of Field and the French study are also supported by the findings of the Karpin Task Force:
Owner managers in small businesses demand experiential learning approaches based on highly relevant case examples, and have a limited tolerance for more generic and less participative instruction.17

(Industry Task Force on Leadership and Management Skills 1995, p.212)

The Karpin Task Force concluded that workplace learning was possibly the most effective means of encouraging participation in management development in the small business sector at the level of the enterprise and individual employer.18

Field rightly observed that while not much training occurred in small businesses, a good deal of learning occurs in small firms. This suggested the potential for a new approach that built on the learning that occurred in the workplace. In this connection, Field observed the potential that existed for learning from networks of small firms.

Table 4: Four perspective on learning organisation development in enterprises

<table>
<thead>
<tr>
<th>Organisation</th>
<th>Cultural</th>
<th>Structural</th>
<th>Experiential</th>
<th>Informating</th>
</tr>
</thead>
<tbody>
<tr>
<td>AT&amp;T</td>
<td></td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>College- Pro Painters</td>
<td></td>
<td></td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Consortium for Productivity in the Schools</td>
<td></td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ernst &amp; Young</td>
<td></td>
<td></td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Exxon Research &amp; Engineering</td>
<td></td>
<td></td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Hanover Insurance</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Honeywell Micro-Switch</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>IBM</td>
<td></td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Johnsonville Foods</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Intermedics</td>
<td></td>
<td></td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Orthopedics</td>
<td></td>
<td></td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Motorola</td>
<td>X</td>
<td>X</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Manulife Financial</td>
<td>X</td>
<td>X</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>PetroCo</td>
<td>X</td>
<td>X</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Royal Dutch-Shelf</td>
<td>X</td>
<td>X</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Tellabs</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>TRW Space and Defense</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>US West</td>
<td></td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Communications</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Whirlpool</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>


There is growing international interest in the potential of this approach—in particular in a context where modern technologies offer the potential to link firms for on-going exchanges of information and ideas. We discuss in chapter 7, how ‘communities of practice’ can be built up in this way through network building, either as virtual communities or networks that include some face-to-face interaction.

Examples can be cited from Australia and overseas of innovative developments that build networks among small businesses for on-going interaction and learning. In Europe, the European Commission has funded a number of
innovative projects in this area, including the FASNET project in Ireland—while in Australia projects such as Executive Link and the Yarra Valley Small Business Network illustrate the potential of learning networks in the small business sector.

While the projects cited above illustrate the potential of the learning network concept in the small business sector, they also point to issues which need to be addressed in extending the role of this approach. Projects of this nature are usually resource intensive in the initial stages and require the services of an experienced facilitator in nurturing the network in the initial stages of development. Ways need to be found to minimise the initial developmental costs and to bed this strategy in the normal business culture and operations of small firms.

Box 6.1: The FAS learning organisation network in Ireland

The FASNET project in Ireland attempts to apply learning organisation principles in the small business sector in Ireland, through developing a collaborative network of small firms. A consortium of small owner-managed firms in Dublin West and the Kildare region came together for this project supported by the European Commission under its EUROTENET program. The participating firms are in a range of sectors. They operate as a self-managed network with developed skills of self-analysis and continuous learning.

In developing this collaborative network, the participating firms agreed on a mission statement which incorporated values and a vision. Eight one-day meetings were held, and a series of individual sessions. The firms learned from each other and have developed a spirit of cooperation and partnership. They have also applied benchmarking to set standards for improving their work. The firms regard the outcomes as valuable, and some are now developing export markets and multinational links.

Box 6.2: Executive Link in the Australian farm sector

Executive Link is another example of a collaborative network that has developed in a small business sector. Members are owner/managers of farm businesses who form small networks (called Boards) of some six businesses. Often spouses participate. Meetings are held three times a year as residential workshops of three days duration. Each network Board develops as a learning community ('community of practice') with farm management consultants assisting the networks. The outcomes have shown strong personal developments for participants with gains in confidence, interpersonal communication, and groups skills. There are positive economic outcomes for participants in these flexible, adaptable learning communities.
Box 6.3: Yarra Valley Small Business Network

This program was initiated by the Victorian Eastern TAFE Business Enterprise Centre in 1997 as a group mentoring program for 14 small businesses. While the program was initiated as a traditional mentoring program, the participants decided that they wished to meet as a group and share ideas and experience. Strong links were established between the participating firms and the community, councils, and chambers of commerce. A facilitator from the Enterprise Centre helped to bond the participating firms as an interactive network.

Participants were positive about the program, and valued the informal learning experiences. The unstructured approach to mentoring was considered appropriate.12

Most projects have also focussed on owner/managers. The potential of this approach to foster learning for all staff in small firms also needs to be tested further. There is a strong case for further experiment and innovation in this area, including testing the role of modern learning technologies in developing and linking firms in these networks.

Recommendation 11
a That the Australian National Training Authority encourage innovation in the application of learning organisation principles in the small business sector, through funding pilot projects to test the development of small business learning networks that apply these principles in a range of contexts.

b These projects should have regard to international experience in the development of small business learning networks.

Other Australian experience

In addition to learning network development in the small business sector along the lines of the Executive Link and Yarra Valley projects, other Australian experience towards a learning organisation concept exists in larger firms that have introduced learning strategies in association with workplace changes, such as moving from old style Taylorist manufacturing to team based manufacturing.
Box 6.4: Learning at Uncle Toby’s, Wahgunyah

The approach adopted at Uncle Toby’s factory at Wahgunyah illustrates how learning strategies adopted in the workplace can open up lifelong learning opportunities for staff, including operative level staff. This approach has been associated with the introduction of self-managing work teams in the factory, so that individual learning in the workplace is supported by team members with team learning a key aspect of this development. In addition, an Open Learning Centre was set up in the factory so that workers had easy access to learning opportunities provided by the Centre at convenient times. Incentives were provided for the workforce to acquire qualifications such as the National Certificate in Food Processing, while the Open Learning Centre provided access to qualifications up to the level of Master of Business Administration. The combination of open learning and structured training in this Open Learning System was designed to meet the needs of both the firm and its workforce. Access and equity was a prime objective with a language, literacy and numeracy program directed at the requirements of staff with needs in these areas. Recognition of prior learning has been applied to enable staff to access career pathways. Uncle Toby’s won the Employer of the Year award in the 1996 Australian Training Awards.

These developments have usually occurred at an operative level, but they have shown the power of learning-focused methods in supporting strategic change in enterprises. Such developments have been more common in trade-exposed industries, such as vehicle manufacturing and food processing, which are under the conditions of global competition, than in other industries.13

The experience of Uncle Toby’s factory at Wahgunyah provides a good example of learning-focused strategic development at an operative level in a larger enterprise.

**VET institutions as learning organisations**

A neglected area of workplace learning in Australia has been the question of the development of VET institutions as learning organisations. There is a *prima facie* case that learning organisation principles and characteristics can apply in the context of a VET institution equally as in any other type of organisation.14

VET institutions would gain much from developing with the characteristics discussed in this chapter. This would provide a basis for:

- coping with change in a proactive way
- fostering continuous improvement in the work of the institution
- a strategic approach to staff development
- closer linkages and partnerships with other stakeholders
- empowering staff to a shared vision
- providing exemplars for students of lifelong learning
- providing lifelong learning opportunities for staff
- benefits to students through a richer education providing a platform for lifelong learning
While some VET institutions across Australia have some of the characteristics of learning organisations, few have as yet deliberately sought to develop as learning organisations. However, developments such as the application of quality principles, benchmarking, action learning, and best practice developments, have taken many VET institutions in the direction of the learning organisation concept.

An example of a VET institution that has explicitly sought to develop as a learning organisation is provided by the Wodonga Institute of TAFE. The work of this Institute is discussed in the Albury-Wodonga case study in Part 2 of this report. The learning organisation aspirations of the Institute are reflected in the Strategic Plan of the Institute.

The Central West College of TAFE in Western Australia provides a further example of a VET institution aiming to develop as a learning organisation.

Box 6.5: Wodonga Institute of TAFE Strategic Plan for 1998-99 (extracts)

Vision
A resourceful learning-driven organisation growing with the region and delivering educational services which have valuable employment, economic and social outcomes.

Key directions
- Promote education and training for work and life
- Establish and maintain a strong market focus
- Provide a balanced and diverse range of educational services
- Demonstrate leadership in the provision of education and training
- Strengthen the greater Albury-Wodonga region economically, socially and environmentally
- Build an effective learning organisation

Box 6.6: Central West College of TAFE

Mission
To contribute to the development of individuals, enterprises and the community through the provision of quality vocational education and training services and lifelong learning opportunities.

Values
They relate to such objectives as quality, customer service, excellence in provision, team work, responsibility and development as a learning organisation.

Ours is a learning organisation in which we value innovation, creativity and professional development.

The Central West College in Western Australia is being developed as a learning organisation as a way of achieving its strategic objectives. These include quality and client service objectives, team work based on the empowerment of staff, excellence in education, and taking responsibility for the outcomes of the College. The strategies being implemented are directed at making the College a flexible and responsive provider of quality VET services.
Research needs

The analysis of this chapter points to the following research priorities:

- testing the application of learning organisation principles in the small business sector through pilot projects in building learning networks of small firms
- monitoring the development of VET institutions as learning organisations through case studies directed at identifying successful strategies in a range of contexts and good practice principles

The former of these needs is covered by recommendation 11. Recommendation 13 relates to the latter priority.

Recommendation 13

That ANTA encourage VET institutions to develop as learning organisations by funding a series of case studies directed at identifying successful strategies and barriers in a range of contexts and good practice principles which could be more widely applied by institutions.

Organisation for learning and the generation of knowledge

The links between learning strategies in organisations, the generation and use of knowledge, innovation, and commercial outcomes make these relationships one of the keys to economic success in a knowledge-based economy. We discuss the challenge of responding to a knowledge-based economy in chapter 13.

Leading firms around the world are adopting strategies to strengthen these linkages, and similar strategies may also be seen in the use of industry clusters of firms by some economic development authorities. We discuss this strategy in chapter 7.

An example of a leading firm that has developed strategies to promote the linkages between workplace learning, the generation and use of knowledge, and commercial outcomes is provided by Asea Brown Boveri.
Asea Brown Boveri (ABB) is a Zurich based company with some 200,000 employees divided into 1300 independently incorporated companies. Staff in these companies serve in some 50,000 multi-function teams which have no more than 50 people in each unit. ABB operates in fields such as power plants, power transmission, mass transit rail systems, with a small central executive in Zurich and with responsibility devolved to local units under a matrix arrangement.

ABB is fundamentally a learning and knowledge generating organisation. It gives effect in its operations to the precept to think globally and act locally. All units of ABB systematically capture knowledge and share it through the ABB system. Informal exchanges and networking are actively encouraged in a policy of creating value through the accumulation of knowledge. One outcome is that ABB displays an unusual willingness to make changes and to respond to changing conditions.

ABB has been called a model for a global learning organisation. It is streamlined in structure, rapid in transferring information and knowledge, committed to continuous learning, staffed by employees who are highly empowered, while it networks and teamworks globally.


General comment

Our review of learning in the workplace points to the critical importance of the workplace in fostering a learning culture in Australian society. Progression to a learning society in Australia will depend to a considerable extent upon whether a learning culture which supports lifelong learning is achieved in the workplace. The learning organisation approach is a valuable strategy to further this objective.

We have concluded that there is a need for active promotion of learning organisation principles and for experiment and innovation in a range of contexts. These include enterprises of all sizes and VET institutions. The recommendations set out above are directed at this objective.

Learning in the workplace is intimately linked to the other contexts for learning discussed in this report, so that the need exists for integrated policies and strategies that foster learning in this range of contexts. Forging strategic partnerships associating all stakeholders will be essential for this purpose.

We take up the question of fostering strategic partnerships in Part 3 of this report.
However, research undertaken by doctoral researcher Roger Byers found more development of learning organisation characteristics in his sample of the BRW Top 1000 organisations than we were able to identify. This survey, based on a methodology developed by Professor Michael Marquardt, showed Australian-owned organisations exhibiting these characteristics to a marginally greater extent than foreign owned organisations operating in Australia. The research is expected to be completed in mid 1999 and could elucidate aspects of the Australian situation. Regardless of development in the top 1000 large firms, a critical issue relates to the learning capability of small and medium enterprises.

In Europe the European Consortium for the Learning Organisation (ECLO) has some 80 members, while in America the American Society for Training and Development (ASTD) has been active in this field, including sponsoring a Learning Organisation Network for some years.


Marquardt, for example, adopts a systems approach based upon six systems.


ASTD 1995.

See, for example, Rosengarten, P, 'Do Learning Organisation Characteristics Lead to Organisational Learning Outcomes, in Growth Through Learning?' ECLO 1996.

Field 1997.

CEREQ, p.4.


The case studies by Liz Harris and Simone Volet (1997) provide a useful collection of these Australian developments.
The 21st century is thus faced with a major challenge, that of rebuilding of human communities. (UNESCO 1996)

Relationship building, it is argued, is the essence of social capital, while learning is its currency. (R. Bawden)

Much learning occurs in community contexts, so that fostering learning communities provides one of the major building blocks of a learning society.

In an era marked by the outcomes of economic rationalism and globalisation, unrestrained individualism in a mass society, social fragmentation, and rising inequalities in society, there has been a growing international interest in rebuilding communities and the role of learning in this process.\(^1\)

The UNESCO Delors Report reflected this growing imperative in the following terms:

*People today have a dizzying feeling of being torn between globalisation whose manipulations they can see and sometimes have to endure, and their search for roots, reference points and a sense of belonging.*

This interest has led to the emergence of the concept of a learning community in a range of forms and contexts. These include both the learning community as a focus for its school and the broader concepts of a learning community that we discuss below.

These forms include the concepts of learning towns and cities, learning regions, communities of practice, and virtual communities. The role of modern technologies enlarges the ways in which communities can be developed and linked, and provides many opportunities for creative innovation.

We found in our consultations considerable interest in the concept of a learning community in its various forms, and in overseas initiatives such as the development of Learning Cities in Britain. During our consultations, Wodonga declared itself Australia's first Learning City, and several other cities are considering this development. Overall, we found that much of the most interesting and innovative development trends lifelong learning was occurring in a community context.

**What is a learning community?**

We have defined a learning community in the following terms.

*A learning community is any group of people, whether linked by geography or by some other shared interest, which addresses the learning needs of its*
members through pro-active partnerships. It explicitly uses learning as a way of promoting social cohesion, regeneration and economic development.

This concept points to the range of social, cultural, educational and economic objectives that a learning community advances. The interdependence of these objectives is a key attribute of a learning community, which enables synergies to be achieved between development in these domains so that the outcomes are value added for the community and its citizens.

A learning community may take a number of forms which are discussed below. These include:
- a community defined geographically, for example a learning town, village, city or region
- a community of practice
- a virtual community

Examples from around the world illustrate the power of the learning community concept. These include regions such as Emilia-Romagna in Italy, and the cities included in the 1992 OECD case studies on City strategies for lifelong learning. These studies include Edmonton, Pittsburg, Gothenburg and Bologna.

Learning Cities

The Learning City may be taken as an example of a learning community defined geographically. However, the same general principles can be applied in a community of any size, whether a village, town, region, or a segment of a city.

We have defined a Learning City in the following terms:

*Cities are not simply places where large numbers of people live and work; they are also places where people experience leisure, culture, enterprise and education—in other words which have learning at their heart. A Learning City unites all the diverse providers of learning to meet the needs and aspirations of all its citizens. Through the range of resources they bring together, Learning Cities can provide local solutions to local challenges.*

Exhibit 4 gives a profile of a Learning City which elaborates upon these characteristics.

The Learning City concept was given a stimulus by the Second Congress on Educating Cities held at Gothenburg, Sweden in 1992. The OECD prepared its seminal report on City strategies for lifelong learning for this Congress, with its case studies of exemplars.
Developing learning communities

Exhibit 5: Profile of the learning city

Values learning for social transformation, economic development and responsible citizenship
- promotes itself as a Learning City
- collaborates with other Learning Cities
- explicitly links learning to social and economic wellbeing
- provides a locus for the successful implementation of State and national policy initiatives
- recognises and celebrates individual and group learning achievements

Provides learning opportunities for all
- promotes pathways and reduces barriers to participation
- encourages recognition of uncredentialled prior learning
- supports those disadvantaged or denied access to learning opportunities

Encourages partnerships
- brings together providers within particular sectors of education or training
- promotes cross-sectoral collaboration and maximum use of ‘the city as campus’
- facilitates local companies and enterprises becoming learning organisations
- encourages clubs, societies and associations to contribute their expertise to the common range of learning opportunities

Provides information
- supports the development of electronic data bases, and access to them by all citizens
- provides information regularly via the media about learning opportunities
- provides or supports the provision of an information office, especially for adults who have left formal education
- provides a dedicated ‘business library,’ and information service

Develops and learns from its own experience
- routinely collects and analyses information about participation in formal and nonformal learning
- undertakes planned and strategic evaluations of its progress against agreed performance indicators
- offers opportunities for continuous public input and comment
- disseminates periodic reviews and analyses of progress

Learning Cities have now developed around the world and may be found in America (Baltimore, Pittsburg), Asia (Kakegawa) and Europe (in particular in Britain, where a strong Learning City Network now exists). Up to now, the concept has had less impact in Australia—although Wodonga has now declared itself Australia’s First Learning City, and there is interest in other cities and in New Zealand.

The British Learning City Network now includes some 20 members. These include cities such as Edinburgh, Birmingham, Sheffield, Nottingham, Liverpool, Southampton, and Milton Keyes. While the objectives, priorities and strategies adopted differ from city to city, a particular thrust in a number of these initiatives has been urban renewal and general community development, with the Learning City approach seen as a strategy for the revitalisation of the city across economic, social, and cultural domains.

The British government has assisted this development through funding provided by the Department for Education and Employment for particular projects. These projects have included:
- a profiles publication on the Learning Cities which gives profiles of each city. ²
development of an evaluation methodology which assesses the value added outcomes of Learning City development.

The assessment methodology development could be applied in a community of any size.

An example of integrated economic and social development as a Learning City is provided by action being taken by Glasgow where leadership is being provided by the Glasgow Development Agency. Box 7.1 provides an overview of this development.

Learning City development in Britain is fairly recent so that it is too soon to make evaluation judgements. However, the evidence available to date suggests that this strategy has much to offer individuals, communities, and society overall in progressing Australia towards a learning society. We comment further on the Learning City strategy in Part 3, Building strategic partnerships, and recommend action to stimulate this development in Australia. The case to encourage Learning Town/City development in Australia is compelling. As the OECD points out 'it will appear that a critical mass of Learning Cities reinforces the synergies and success of each.'

World class in a global economy

The Learning City concept has value as a strategy for integrated economic, social, cultural, and educational development.

Box 7.1: Glasgow—The Learning City

Action taken by the city of Glasgow illustrates a proactive strategy which links economic development objectives with broad social objectives: Leadership is being provided by the Glasgow Development Agency, which is part of the Scottish Enterprise network and which has created a position of Director Lifelong Learning to co-ordinate action. The Glasgow Development Agency is a member of the European Consortium of Learning Organisations (ECLO) and will host the 1999 ECLO annual conference. The Glasgow Learning Alliance associates a range of partners with the Agency.

In order to drive the process of developing Glasgow as a Learning City, a process termed a Learning Inquiry has been instituted. The Learning Inquiry seeks to widen participation and achievement of learning through the design and implementation of practical and workable solutions directed at the identified barriers that inhibit positive learning outcomes.

The Learning Inquiry is focussed on four main themes:
- how to get more organisations involved in developing their people
- how to stimulate personal motivation to learn
- how to surmount the barriers to learning
- how to encourage institutions to improve quality in the supply and access to learning

Themed Action Groups (which will include volunteers) will address these themes.

These themes were selected after careful research and planning, which included a survey in October/November 1998 of adults in Glasgow. This attitudinal and behavioural survey identified the main barriers to be addressed by the Learning Inquiry, and generally confirmed the findings for national attitudes to learning surveys.

Glasgow has established a website for 'Glasgow—the Learning City' and has instituted a Lifelong Learning Information Service. Learning Direct Scotland provides information for callers on learning opportunities. Future activities include a Learning Festival, Personal Development Show, and hosting the first Global Learning Cities Conference to be held in September 2000.
Professor Rosabeth Kanter in her work on world class local economies in the global economy, points to the significance of three C’s in world class development:

*concepts, competence, and connections.*  
(Kanter 1995, p.354)

World class Learning Cities seek to develop in each of these areas with the success of business in such cities deriving heavily from their linkages. These businesses draw heavily from relationship-based social capital as well as from financial capital.5

Learning Cities can be places where all these attributes of world class are fostered. New concepts are developed, new ideas spread easily, and innovators exchange expertise with others in the industry.

**Learning in regions: Building a learning economy**

The learning community concept can be applied to regional economic development as well as to communities of a different type and character, and we observed in the case studies, and in the international literature, developments that went in the direction of applying learning community principles in a regional economic development context.

Such developments are consistent with emerging integrated approaches to regional economic and social development, which regard learning as a central process for regional development in a knowledge-based globalised economy.6

The concept of a learning economy has been conceptualised by Lundwall and Johnson, Hanssen-Bauer and others.

Asheim comments in the following terms:

> The learning economy is based on the view that knowledge is the fundamental resource in a modern capitalist economy, and learning the most important process, thus making the learning capacity of an economy of strategic importance to its innovativeness and competitiveness.  
(Asheim 1996, p.18)

This orientation highlights the relevance of the learning process to innovation in a regional economy.7

We observed in the case studies of both Newcastle and Albury-Wodonga the use of industry clusters of firms as an innovation strategy.8 Such clusters of firms are rightly regarded by Martinez as learning systems,9 so that the value of the outcomes of this development strategy depends to a considerable extent upon the quality of the interaction and learning that occurs between the firms in these clusters.

This suggests the need to develop methodologies to assess the value added outcomes of industry cluster development, possibly along the lines of the methodology developed for the British Department for Education and Employment to assess the value added outcomes of learning community development.10

It is likely that industry cluster/focus group strategies will be increasingly common in regional economic development as innovation strategies; so that the need exists to develop instruments to monitor and guide their development,
and evaluate the outcomes. Learning community principles could be usefully applied in the development of such assessment instruments.

In a global economy where global networks are dominated by large firms, the role of local networks or clusters as territorial agglomerations to enhance the competitive positions of regions is a key issue. This is an area where research is needed to clarify the role of learning community principles in developing competitive regional economies. The role of VET institutions in stimulating and supporting such development also needs examination.

While there has been a growing interest in the role of universities in contributing to regional economic development, the role of VET institutions has been neglected. Studies of the role of universities in both Australia and overseas have concluded that their contribution has generally been ad hoc rather than strategic, and it is likely that a similar conclusion would be reached in the case of VET institutions.

In the light of the critical significance of building strategic partnerships, both for regional economic development and to foster lifelong learning, there is a need to examine ways of encouraging strategic university/VET partnerships as an instrument of regional economic and social development. The role of economic development agencies in fostering a learning economy development is illustrated by action being taken by the Glasgow Development Agency (box 7.1).

Much would be gained by documenting and assessing partnership strategies in regional locations such as Wodonga and Ballarat where Learning City strategies are being developed. This should focus on clarifying the strategic contribution of VET institutions to regional economic and social development.

**Communities of practice**

Communities of practice are likely to become increasingly significant in future in a world where technology enables networks of common interest to be developed beyond the constraints of time and place.

Many forms of communities of practice may exist. The essential feature is that a group is linked for a common purpose which involves on-going learning and interchanges of ideas and experience. This form of community has substantial value for the generation of new ideas, broadening visions, and generally enhancing the creativity and development of members of the community.

Communities of practice may evolve for a wide range of purposes. These include:

- common interests, for example birdwatching, vintage cars, astronomy
- professional staff development, for example national network in a particular field or across sectors
- linking isolated geographic communities
- networks in an occupation, industry, or businesses, for example a network of farmers or small business owners

The potential of communities of practice to link isolated communities to share ideas and experience is substantial. For example, a network of learning centres in isolated communities could be linked using technology to enable on-going dialogue between the communities on matters of common interest.
Videoconferencing has been used by Aboriginal communities in the Tanami desert in the Northern Territory in this way, to link these communities. Regional VET institutions can play a catalytic role in the development of distributed learning networks and other forms of communities of practice in regional areas. Communities of practice may evolve organically over time or may be structured.

An example of a structured community of practice is provided by Anderson Consulting Education in America.

**Box 7.2: Anderson Consulting Education as a community of practice**

This arose as a professional self-development association. Groups of Anderson Consulting Education staff in America came together to network, collaborate, experiment and share learning-related ideas and skills in a safe environment. All employees were invited to join the group on a voluntary basis. A Charter was adopted for these communities, which included a statement of mission and goals. Groups organised their own activities, and each Interest Group developed its own culture and identity. Good ideas coming from the groups were passed on to Anderson Consulting Education management. Groups developed innovative relationships with schools, colleges, and other bodies through their activities. A Community of Practice Conference in June 1997 found a range of beneficial outcomes.

Various Australian examples can be cited of evolving communities of practice. In chapter 6, we cited Executive Link as a community of practice which linked networks of farm owner/managers for on-going interchanges. The potential to build communities of practice in the small business sector is very substantial, and we also cite the Irish FASNET project as a learning network in the small business sector. Other European Union projects using networking in the small business sector are proceeding. In Australia a range of research, environmental and industry programs such as Landcare, Rivercare, Coastcare, and Fisheries Action Program have adopted learning community principles.

**Virtual communities**

While communities of practice may exist on a face-to-face basis, modern technologies may also be used to link members in these communities who are in different locations. For this reason we expect the distinction between a community of practice and a virtual community will disappear over time.

Nevertheless, technologies such as Internet and email offer great opportunities to build virtual communities which link Australian members to members in any country. Developing virtual communities offers very substantial benefits in countering the geographic and intellectual isolation of Australia, so that Australian enterprises, institutions, communities, and individuals are open to new ideas emanating from sources anywhere. There is a strong case for experiment and innovation in this area.
Creating meaning: The heart of learning communities

There is evidence that the process of creating meaning is central to building learning communities. The process of building shared understandings and meanings appears to be important in communities and organisations where Senge uses the concept of dialogue to denote this process of making underlying assumptions explicit and constantly questioning them. Creating shared meaning gives identity and purpose to the community.

This process has also been observed by one of this team in effective equity projects which adopted a community development strategy, so that the equity project became an instrument for creating a dialogue among the partners in the project, which led to incentives and support for the target group in accessing VET.

This is a key area for research and development. There is a need for Australian research focussed upon the process of building learning communities, and on equity strategies that adopt a community development approach. Case studies over a reasonably significant period of time would have considerable value.

Strengthening family learning

An important context for learning is the learning that occurs in families. The family environment can be a stimulus to lifelong learning and personal development, or it may impose attitudinal and other barriers that exclude individuals from learning opportunities.

The growing role of modern technologies increases the potential of the family as one of the key contexts for learning in a learning community. While good practice examples exist, anecdotal evidence suggests that the full potential of modern technologies to strengthen family learning has not yet been achieved. Hence, the likely value of strategies that link learning in communities and institutions with family learning. This is an area for experiment and innovation.

The value of linking learning at different stages of life at the local level through 'intergenerational learning' has been recognised and has become common in North America, in fields such as joint literacy classes for adults and their children.

Some American examples are:
- The University of Pittsburg runs a project, 'Generations Together,' which trains people over 50 for employment in child-care centres.
- The 'Pittsburg Partnership,' a municipal program, has a scheme which combines three generations: teenage mothers attending literacy and parenting courses and required to leave their children in a specified day-care centre, are asked to bring a parent or other relative to participate in the course.

Promoting family learning through such mechanisms as 'Family Learning Day' has become a feature of British promotion for lifelong learning, with bodies such as the Campaign for Learning active in this field.

Overall, strengthening family learning offers considerable potential as a strategy for building learning communities and for encouraging and supporting individuals as lifelong learners.
Australian experience

There is significant Australian experience in some aspects of building learning communities. This experience resides in developments such as:

- the Queensland Open Learning Network
- the Telecentre network, in Western Australia
- a number of ANTA community based equity projects
- the research of the Centre for Research and Learning in Regional Australia, at the University of Tasmania
- emerging greenfields development, such as the Mawson Lakes development in South Australia

Most of this experience resides in small communities in rural and remote areas, and there is less experience in applying learning community principles in larger towns and cities, and in metropolitan areas.

However, useful good practice principles can be derived from the experience of the Queensland Open Learning Network and Western Australia Universities, which have a wider relevance.

Box 7.3: Queensland Open Learning Network (QOLN)

QOLN was established in 1989, as an initiative of the Queensland Government to improve access to learning opportunities for communities where access was restricted through isolation and other factors. QOLN has developed a network of over 40 Open Learning Centres which perform a range of roles and functions in their communities.

The centres aim to be a community focal point for learning. Co-ordinators are employed from the local community and are required to encourage local involvement and build local support, so as to broaden the impact of the centre in the community.

QOLN has developed a human network of co-ordinators with a technological infrastructure. In its work QOLN provides a learning infrastructure which links communities and learning providers. A key aspect is that both VET and higher education are able to use this learning infrastructure to support the development of lifelong learning in communities. The evolution of the Network has provided a stimulus to innovation in supporting learning in small communities. An example of such innovation is given in Box 7.4 below.
The Queensland Open Learning Network conducted a community education program during 1998 that aimed to provide members of the Tablelands community in Far North Queensland with sufficient knowledge and skills to make decisions about how the Internet could benefit their economic and community development, and contribute to lifelong learning for the community.

This program employed a range of methods, including print materials, fact-to-face workshops, online learning materials and web services. The learning strategy adopted progressed through successive awareness, understanding, and consolidation phases, with the consolidation phase leading to guided community driven interactions on-line. There was active community involvement in each phase. Community feedback was positive with high levels of satisfaction in the program.

Box 7.4: Tablelands Online: Internet community learning program

Mawson Lakes is a ‘City of the Future’ urban development project currently under way ten kilometres north of Adelaide. This is a joint development between the South Australian Government and Delfin Land Lease consortium, to establish a learning community at Mawson Lakes. Learning will be integrated in the day-to-day life of all residents, with information technology having a key role in the delivery of education and training services to the community. The principles being applied in Mawson Lakes could be applied across Australia in developing learning communities. Key features include community involvement in the project in all phases, the active development of partnerships, the goal of learning technology for everyone, and the development of quality course-ware materials.

Further examples could be given from across Australia of community based projects similar to Tablelands Online. These include developments from equity projects such as the Ouyen Learning Centre, the Corryong and Mount Beauty Learning Centres, and the Georgetown Learning Centre. The current Victorian Virtual Campus development, and its associated Learning Network project, will provide further examples.

The outcome of this activity is a body of experience that provides good practice principles for community learning development. As yet, few examples exist in larger towns and cities, and the next phase of this development should be aimed at innovation and experiment in applying learning community principles in larger towns and cities.

Research

Research on learning community development in regional contexts has been advanced through the work of the Centre for Research and Learning in Regional Australia at the University of Tasmania. This work has served to clarify such aspects as the role of social capital in regional development. An International Symposium, conducted by the Centre in June 1998, provided a useful set of
papers that range across the broad fields covered by the work of the Centre. While innovations such as those discussed above point to the value of learning community strategies, the case studies we conducted in association with this study also illustrate a number of issues and barriers that will need to be addressed in progressing learning community development in Australia—particularly in larger communities where a more complex spectrum of issues and barriers exist.

The issues identified in the case studies include:
- the outcomes of economic rationalisation and competition, which mitigate against strategic partnership development
- funding methods and levels which inhibit innovation
- barriers to employer involvement
- access and equity issues
- the equivocal position of technology, with its potential not fully realised
- resolving values tensions and conflicts

The evidence available to us suggests that these issues are more easily addressed in small communities, where strong community bonds exist, and where a community learning culture can be a focal point for community aspirations and development. However, continuity beyond pilot project funding remains an issue in many of these cases. The complex set of issues that exist in larger towns and cities require investigation.

Building social capital

*Relationship building... is the essence of capital, while learning is its currency.*

The growing interest in learning communities and regional sustainability has led to a renewal of interest in the concept of social capital and its impact on economic outcomes. In Australia this interest has been given a stimulus through the work of the Centre for Research and Learning in Regional Australia (CRLRA) at the University of Tasmania.

Social capital has been defined by Coleman as existing in the relations between people so that where strong social capital exists, this 'oils' economic and social activity so as to enhance socio-economic outcomes. The focus on the quality of relations between people means that attributes such as trust are seen as central to this concept.

The work of CRLRA has explored the relationships between the quality of learning in community, social capital in that community, and sustainable economic outcomes—particularly in regional areas of Australia. A range of papers presented at the International Symposium on 'Learning communities, regional sustainability, and the learning society,' held in June 1998, pointed to positive relationships. The focus on the quality of relationships between people means that attributes such as trust are seen as central to this concept.

Well known examples cited in these papers, such as Emiglia-Romagna in Italy, as well as Australian examples such as Executive Link, point to the considerable potential of learning community strategies for building social capital in communities, which has an impact on both economic and social outcomes. OECD case studies included in the 1992, Centre for Educational Research and
Innovation (CERI) study on City strategies for lifelong learning illustrate how social capital can also be built up in urban centres through community learning strategies. The case studies for Pittsburg, Bologna, Edmonton, Gothenburg, and Kakegawa illustrate this process.

In our case studies we observed a similar process of social capital development: in particular, the Newcastle, Albury-Wodonga, and Ballarat studies. Other case studies showed relationships less developed: the full potential of social capital accumulation in these communities had not yet been realised.

The growing importance of this area for socio-economic outcomes in Australian communities, and for personal fulfilment and quality of life overall, points to the need for more research in this area—including case studies of learning community development.

The case studies we undertook for five communities have a role in identifying issues that require further examination over a longer period of time. There would be much value in a range of case studies in rural, regional and metropolitan locations being undertaken over a more significant period of time than we had.

If a pilot program of Learning Towns/Learning Cities is funded as we recommend below, case studies could be built into this program so that the lessons are widely available to guide learning community development throughout Australia. We take up this need in our recommendations in chapter 10.

**Issues and needs**

Our review of the learning community concept above points to a number of needs in Australian development, and a set of issues to be confronted:

The needs include:
- the need to stimulate experiment, innovation and information exchange across Australia in a range of contexts
  - learning towns and cities, communities of practice, virtual communities
  - bodies such as ANTA, NCVER, DEETYA, RCVET and RCLRA can have major roles in this development
- addressing in particular the question of learning community development in the Australian metropolitan centres, through research and development projects
- linking training to learning community development; we discuss strategic partnerships in chapter 10

We take up recommended action in these areas, in the context of building strategic partnerships.
Notes

2 Department for Education and Employment 1998a.
3 Ibid.
4 OECD 1998b, p.4.
6 Asheim 1996.
8 Investment Albury-Wodonga uses industry focus groups and the Hunter Regional Development Organisation uses a system of industry clusters.
11 See, for example, Mitra, J & Formica, P 1997.
12 Ibid., p.25. Garlich 1998 reached a similar conclusion with regard to Australian universities, seeing the relationship as tentative. He observed that many were now considering how they could have a stronger relationship with their regional economy.
16 Senge 1990, pp.238-249.
17 Kearns & Grant 1998.
19 Ibid., p.65.
20 Kearns & Grant 1998, Volume 2.
8 Creating a learning society

The learning society. Its advent can only be conceived as a process of close interweaving between education and the social, political, and economic fabric which covers the family unit and civic life. (UNESCO 1972)

Australia as a learning society needs to be seen as a new social era that is responsive to the drivers of change discussed in this report. Achieving such a condition will require a learning revolution in Australian society.

A learning society is one in which everyone who wants to do so is able to participate in education and training, both formal and informal, throughout their lives. Information about learning opportunities is widely available and provision is driven by demand rather than by supply, and learners—and potential learners—are enabled and empowered to pursue their individual preferences through financial arrangements and incentives at all levels in society.

A learning society may be seen as an interactive, information-rich society with learning widely diffused throughout society, and with a culture that values and supports learning throughout life for all citizens.

In this sense, it is fundamentally democratic and is aimed at the aspiration of a humane, inclusive society. Building community at all levels is a central aim of the learning journey towards such a society in a world increasingly fragmented and polarised. Concepts such as the learning organisation and learning community have figured prominently in this report as strategies for advancing lifelong learning and the values associated with the concept.

While the concept of lifelong learning is essentially liberating and empowering for individuals and communities, building a learning society will depend to a considerable extent on the diffusion throughout society of the values associated with the concept. These are fundamentally the humane, democratic community values that are necessary to underpin an inclusive learning society with a passion for learning and achievement.

Values such as love of learning, curiosity, creativity, and personal fulfilment will be the hallmarks of a learning society. These values are reflected in the profiles of the lifelong learner, learning organisation, and learning community given in this report.

While the concept of a learning society is an attractive capstone to a view of lifelong learning in Australian society, there is much that needs to be worked through in the journey to such a society. Among other aspects, there is a need for a framework that conceptualises education/economy relationships in the context of a view of society as a whole. Such a framework has been missing
from the discussions of education and training in Australia over the past decade.

The interaction of technology, globalisation, and economic rationalism with aspirations for lifelong learning, personal fulfilment and building community in a world of fragmentation and uncertainty is likely to mark the ferment of competing principles that will mark the pathway towards a humane and inclusive learning society.

Yet there is much in the current environment that points towards such a society in the terms defined by Roberto Carneiro in the UNESCO Delors Report, 1996:

The mass society and individualism that characterised the first generation of information and communication technologies, raising the triumphant economic model to its zenith, are now being superseded by a second technological generation in which the idea of networking and the value of neighbourhood relations are beginning to reappear. The learning society, based on a code of knowledge-sharing and on learning experiences created by unrestricted interpersonal relations that globalisation makes possible, seems bound to encourage the emergence of post-materialistic values.

Clarifying the value base of Australia as a learning society will be an important part of the journey towards such a society.

While the antecedents of the notion of a learning society may be traced back to ancient Athens and its notion that 'the city educated the man,' there is now a new urgency in the aspiration towards a learning society in the conditions discussed in Part 1 of this report.

Building a learning society is a critical challenge for all sectors of education and training, and for all other stakeholders. The VET sector, in company with its alter ego ACE, can contribute much in its 'frontier' role of linking the formal education system, enterprises, and communities.

For Australian society as a whole, building a learning society is a necessary Utopia in the conditions of the New World.

In Part 3 we turn to six key challenges that need to be confronted in the journey towards a learning society.

Notes
1 Young 1994.
Part 3: Challenges

Achieving lifelong learning in a learning society poses a number of critical challenges for the VET sector, and for other stakeholders. In Part 3 of this report we discuss six challenges that we have identified as central to the role of VET sector in the transition to a learning society.

In setting out these challenges, we wish to give concrete operational shape to the conceptual and contextual themes and issues discussed in Parts 1 and 2 of this report. Each of the challenges discussed will require practical responses in VET policies; at the same time, such policies are linked in a coherent program to advance lifelong learning.

The challenges discussed over are:
- Promoting understanding and demand for lifelong learning
- Building strategic partnerships
- Achieving equity in a learning society
- Using technology wisely
- Responding to a knowledge-based economy
- Orienting VET institutions to lifelong learning objectives

These challenges are further linked in the more general discussion, in Part 4, of the implications of lifelong learning for the VET sector.
9 Promoting understanding and demand for lifelong learning

*Lifelong learning needs to become alluring to the individual and a high satisfaction in itself.* (George Papadopoulos)

A central challenge posed by the emerging New World of VET is 1) to foster understanding of the significance of lifelong learning for individuals, enterprises, and communities, and 2) to promote a demand for lifelong learning in all sections of the community.

This will require active demand side policies and strategies.

We found in our consultations across Australia that the significance of lifelong learning was not well understood, so that lifelong learning appeared marginal to the work of VET. This situation is reflected in the priorities of institutions and systems. Australia is far from having a learning culture, which will be essential in the New World of the 21st century.

This is hardly surprising, as there has been little active promotion of lifelong learning in the VET sector, let alone elsewhere in Australian society—apart from the commendable pioneering activities of the ACE sector, which have been constrained by limited resources.

This situation contrasts with the position we found in Britain and in other countries of the EU, where there has systematic promotion of lifelong learning by the EU, and by the governments of countries such as Britain, Norway and Finland. The ‘Overview of international trends’ undertaken by Dr Papadopoulos for the team (Volume 2) points to the active promotion of lifelong learning in the countries of the EU and elsewhere.

In Britain, lifelong learning has been promoted throughout the 1990s in a range of ways. These have included:

- the activities of private bodies such as The Campaign for Learning, Royal Society for the Encouragement of Arts, Manufactures and Commerce (RSA), and the National Institute of Adult Continuing Education (NIACE)
- the activities of Learning Cities and the Learning Cities Network
- the work of Europe-wide bodies such as the European Consortium of Learning Organisations (ECLO)
- research sponsored by government agencies, RSA, NIACE, and others
- the British government’s Green Paper of February 1998 on lifelong learning

The mix of public and private promotional activity has produced a density of relationships and partnerships which facilitate the flow of new ideas about
learning in a wide range of contexts and which stimulate outreach activities directed at non-participants.

The work of The Campaign for Learning illustrates the pattern of public and private partnership which exemplifies the British approach to promotion of lifelong learning. The Campaign for Learning began as an initiative of the Royal Society (RSA) with the RSA Director for Learning, Sir Christopher Ball, having a leading role.

The organisation receives an annual grant of £250 000 (about A$740 000) from the British government for its work, and receives further support from the corporate sector. It operates with a range of distinguished people as Trustees and Patrons of the Campaign, and with support from its corporate sponsors, such as Esso, who are usually active in promoting lifelong learning in their organisations.

The Campaign for Learning publishes a regular quality newsletter, and sponsors special events such as Family Learning Day. It has taken a close interest in community attitudes to learning and sponsored national Attitudes to Learning surveys in 1996 and 1998. A series of Marketing Learning Toolkit Seminars (based on the Campaign's marketing toolkit) have been conducted in selected locations.

The outcomes of this active promotion of learning in Britain are beginning to be reflected in survey findings. The 1998 Attitudes to Learning survey showed an increase of 10% in the number of adults wanting to take part in learning in the coming twelve months—an increase from 55% in 1996 to 65% in 1998.

Need for demand side policies and strategies

One of the key lessons of the British experience over the past decade is the need for systematic demand side policies as the lever to initiate a learning revolution and to progress towards a learning society. This orientation is especially necessary in addressing equity objectives in respect of non-participants and in fostering a just, inclusive society, and in raising aspirations.

In addition to the activities of bodies such as the Campaign for Learning, NIACE, ECLO, and the Learning City Network, there is a strong demand side orientation in the policy initiatives outlined in the British government's Green Paper of February 1998 on lifelong learning, The Learning Age.

Measures to foster demand for learning are reflected in the information, guidance, and counselling initiatives of the Green Paper and in the incentives proposed to address barriers to the participation in learning activities.

These initiatives include:
- the role of the Ufi in providing information services and in generally stimulating demand for learning through measures such as its national network of learning centres
- Learning Direct, which operates as a free national telephone helpline providing advice on learning and on available courses
- a national system of individual learning accounts which will provide incentives for individuals to invest in their own learning

...
The UfI represents a new form of public/private partnership based upon innovative use of technology, and with local delivery points through the national network of learning centres which will be franchised.

The national system of individual learning accounts is seen as a way of providing incentives for individuals to invest in their own learning, and to take responsibility for it.

While the system is still under development, the Green Paper has foreshadowed 1) that, in the medium term, tax incentives might be used to encourage individuals to invest in learning or 2) that individuals' contribution could be matched by public support.

In the short term, the Government has indicated that it proposes to fund up to one million learning accounts.

The need for demand side policies to stimulate and support increased participation in adult learning has been recognised in Australia by Adult Learning Australia (formerly AAACE) in a set of proposals for lifelong learning initiatives submitted to the Australian Government in October 1998.

These proposals, which were designated a three year Lifelong Learning Initiative, were seen as a set of inter-connected policy and program measures that would provide incentives and support for non-participants to become active lifelong learners.

The package of incentives involved the following:
- support for Employee Development Programs
- support for a Learning Cities Network
- enhancement of Information, Guidance and Counselling services for adult learners
- government review of its own role in citizen education
- national State of Learning report of participation in adult learning
- integration of Adult Learners Week into a lifelong learning policy framework
- a review of taxation and learning
- individual Learning Accounts

Our study has confirmed the need for demand side policies of the kind proposed by Adult Learning Australia and we recommend to governments action along these lines.
Recommendation 4

a. That governments note that the urgent need exists for coordinated demand side policies that will promote a demand for learning on a whole-of-life basis among those not participating in learning activities beyond the level of schooling.

b. Such policies should give priority to information and guidance activities, special events to promote lifelong learning, and to strategies such as the Learning City approach which forge strategic partnerships to foster a culture of learning.

c. Strengthening the research base for demand side policies is a necessary part of this development, and should include participation and attitudes to learning surveys.

Promotion and equity

We discussed in chapter 5, the way in which participation in learning activities beyond the school level is biased by influences such as socio-economic status, age, gender, employment status and prior education and qualifications. The profile of the more than one-quarter of the population who do not participate is clear, and points to the danger of a polarised society in the emerging conditions of New World.

For this reason equity considerations should be central to promotional strategies and demand side policies. We comment further on these issues in chapter 3, below.

Views of project seminar

The project seminar held in Sydney, on 25 November 1998, discussed this challenge, and agreed that this was a priority area for action.

Aspects emphasised in the seminar included the following:
- government should have a key leadership role so that a vision of Australia as a learning society was fostered
- There was a need for eminent ‘champions’ to promote lifelong learning, as occurred in Britain
- Role models were needed at all levels, with teachers being particularly important as role models
- Strategies were needed, such as the Learning Town/Learning City strategy, which created a critical mass of interactions involving all stakeholders so that promotion becomes an integral component of the pathway towards a Learning Society.

We agree with these comments, which supplement the approach set out in the Adult Learning Australia proposals. We comment further on promotion in Part 4 of this report, in the broader context of policies and strategies to progress Australia towards a Learning Society.
Role of technology and media

The British experience with promotion of lifelong learning suggests the key role that technology and the media can play. The UfI concept is based on the role of technology in enabling individuals to access information and guidance. This is an area for further development in Australia.

The media has also played a significant part in Britain in promoting demand for lifelong learning in Britain, including promotion of special events such as Adult Learners Week. This is an area for development in Australia in building strategic alliances to promote lifelong learning throughout the community.

The need for strategies built on interdependencies

A further key conclusion from our study is that the need exists for broad interwoven strategies which build on the interdependencies that exist between the contexts for learning discussed in this report. Such strategies are essential in a connected society and economy in leading to synergies and value added outcomes.

We have identified the learning community/Learning City strategy as having particular value in this connection. A learning community strategy enables strategic partnerships to be developed between stakeholders, and provides incentives and opportunities for participation in learning activities. This approach has particular value as an equity strategy, in providing incentives and support that are available in community resources and relationships. Promotion, building understanding and demand occurs naturally and organically in such a social framework, while special promotional activities, such as Adult Learners Week and Family Learning Day, can be highlighted in this broader framework of on-going promotion and development. For these reasons we strongly recommend action to build learning communities of all types in Australia.

Industry support for lifelong learning

A key stakeholder in the advance of lifelong learning in Australia is the business and industry community. To date there has been little promotion of lifelong learning in industry, so that this is generally not seen as a priority for industry. As indicated in chapter 6, this observation also holds for the limited promotion of the learning organisation strategy.

There is therefore a vital need for the active promotion of lifelong learning in industry, as a basis for the development of a learning culture in industry that will support innovation, enterprise, and adapting to changing conditions. There is national interest in this happening.

A number of recommendations of this report, if implemented, will support this development. In addition, industry associations and Industry Training Advisory Bodies should be active players in the promotion of learning in industry. We envisage bodies such as the Australian Chamber of Commerce and Industry and the Business Council of Australia, as well as sectoral industry associations, having a key role.
Industry leadership is essential if Australia is to develop a learning culture in industry required to be competitive in the Learning Age. This has been a feature of the British scene when there has been active business and industry support for the national Campaign for Learning, and other learning initiatives.

Whether Australia becomes a competitive learning society will depend crucially on active industry support for lifelong learning.

Recommendation 21

a  That business and industry associations take action to promote understanding and demand for lifelong learning throughout industry, so that industry is an active partner in the development of a learning culture in industry and in Australian society generally.

b  This promotion should include strategies such as the learning organisation and learning community discussed in this report.

We envisage Industry Training Advisory Bodies and unions being active partners in the implementation of recommendation 21.

Concerting the research effort

The need exists for a coordinated research effort to underpin policies and strategies to promote understanding and demand for lifelong learning. This is an area where the National Centre for Vocational Education Research, in collaboration with other stakeholders, could play a key role. We comment on this requirement in chapter 5, and propose action by NCVER in recommendation 3 to address the need for concerted research effort.

Notes

1  Secretary of State for Education and Employment 1998a.
2  See appendix 6.
10 Building strategic partnerships

The Government believes that the excessive emphasis in the past on market competition has inhibited collaboration; and that strong partnerships are now needed to develop efficient local strategies for learning.

(Secretary of State for Education and Employment 1998b)

It is abundantly clear that the pathway to a learning society in Australia will require building strategic partnerships of stakeholders at all levels, to advance learning in a wide range of contexts.

It is also evident that this will require addressing the barriers to partnership development which were articulated in our consultations across Australia and which were further identified in the case studies we undertook. These barriers include the emphasis on competition over co-operation of recent years, funding methods and priorities which afford little incentive for innovation and partnership development, and cultural, administrative, and ideological differences between the sectors of education.

In the New World we have discussed in this report, partnership development is critical. The diffusion of learning throughout society in many forms and locations means that only effective partnerships will achieve optimum outcomes for individuals, families, employers, institutions, communities, and society overall.

The importance of partnership development, and the interdependence of the contexts for learning, discussed in Part 2 of this report, has led us to take a close interest in strategies such as the Learning City/learning community approach which are based on strategic partnership development.

Who are the partners?

In a connected world, all stakeholders in Australian society are potential partners in building strategic partnerships for learning. This means that we envisage individuals, families, governments, employers and enterprises, unions, other organisations, educational institutions, and communities as potential stakeholders in partnership development.

The interaction of stakeholders is likely to take different forms in the various contexts and levels for learning discussed in this report. This suggests the development of a diverse range of partnerships.

What are the barriers?

Our consultations, case studies, and literature search all pointed to certain key barriers to partnership development which need to be addressed. These include:
the emphasis on competition over co-operation in an environment of economic rationalism
funding policies and priorities that support this orientation and provide few incentives for partnership development
cultural and philosophical differences between the sectors of education which inhibit partnership
a focus on the short-term, as against investment in strategic long-term directions
the pressures on VET institutions to meet the short-term priorities of training reform
the relative scarcity of bodies with the expertise and resources to broker partnership development
short-term market pressures on enterprises for survival, in particular in the small business sector

The cumulative impact of these influences has produced an environment and culture that has not been conducive to strategic partnership development.

On the other hand, we observed examples of innovative partnership development across Australia, and we have summarised some examples in this report. In most of the cases we observed, partnership development occurred with special project funding, so that the need exists to make strategic partnership building an integral component of the on-going work and development of the VET sector. This will require strategies to bring about cultural change to underpin a partnership ethos.

Strategies for partnership development

We have commented in Part 2 on some key strategies for partnership development. These strategies are:
- the Learning City, learning community, learning region approach
- building learning organisations

These strategies can be applied in communities or organisations of any size. We have observed a learning community approach in a small community focussed around the role of a community-owned learning centre, while cities as large as Birmingham, Sheffield and Edinburgh are developing as Learning Cities.

A learning community strategy is centred essentially on the quality of the partnerships that are developed among the stakeholders in the community, so that the partnerships become learning systems. The stronger and more interactive the partnerships, the more value added the outcomes.

A learning organisation approach also fosters a partnership ethos and culture, both within the organisation and in its interaction with its external environment. For this reason we regard these strategies as complementary and mutually supportive, and we recognise the need for active promotion of both strategies as a principal pathway to strategic partnership development for lifelong learning.

While there has been significant development of both strategies in other countries, Australian experience in each of these fields is more limited. Only the City of Wodonga has so far declared itself a Learning City, and it is not known how many Australian enterprises are developing as learning organisations.
evidence available to us suggests that few VET institutions are explicitly developing as learning organisations in a strategic way, although we cite some examples in chapter 7.

We have therefore concluded that the challenge of building strategic partnerships for lifelong learning should be met by active measures to encourage and support learning community/Learning City and learning organisation development in a range of contexts.

Adult Learning Australia, in a recent submission of proposals to the Australian government for promoting lifelong learning in Australia, included a proposal for the development of a Learning City Network through a pilot phase of experiment and development. We strongly support this proposal as a way to forge strategic partnerships for lifelong learning.

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**Recommendation 16**

That we strongly support the proposal of Adult Learning Australia for the Australian Government to fund a pilot program of Learning Town/Learning City development in a range of contexts, in order to test principles for strategic partnership development to support lifelong learning for all and to progress Australia towards becoming a learning society.

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**Learning from British experience**

There would be substantial advantage in building upon the experience of British cities such as Glasgow, Sheffield, and Liverpool in the strategies adopted for Learning City development. An effective way to do this would be for NCVER, in association with ANTA, to sponsor the visit to Australia by one or two key people who have been closely involved in Learning City development. Such visiting experts could conduct seminars across Australia in selected locations. This would serve to foster knowledge and understanding of this important strategy for lifelong learning, and to provide useful insights and lessons into effective strategies for Learning City development.

We have found considerable interest in the Learning City strategy in our consultations across Australia, and a visit by one or two British practitioners in this field would be timely in furthering this interest.

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**Recommendation 20**

That the NCVER, in association with ANTA, sponsor the visit to Australia by one or two British practitioners who have been involved in Learning City development to conduct a series of seminars in selected Australian locations on strategies for Learning City development.

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**Metropolitan contexts**

While we found the case studies that we conducted in five regional centres of considerable value in assessing themes and issues relevant to lifelong learning in these contexts, our study did not include the large metropolitan environments where most of the Australian population resides. While there is some evidence
that similar learning principles could be applied to community and partnership development in metropolitan contexts, this question needs to be examined as a priority so that comprehensive policies and strategies can be forged to progress lifelong learning in Australia in metropolitan, regional, and remote environments.

We are therefore recommending that a similar set of case studies be undertaken for selected metropolitan contexts to the regional case studies we undertook. This study could draw upon the growing body of international experience with Learning City development in Britain and elsewhere, and research being undertaken by bodies such as the OECD. In Britain, the Learning City Network includes large metropolitan centres such as Birmingham, Edinburgh, Sheffield, and Liverpool, which could provide useful comparative lessons and insights.

This study could also draw on the current work of the OECD on Learning Cities and Regions. This project, which is examining conceptual, evaluation, competitive strength, and social cohesion aspects of Learning City development, will include a series of seminars throughout 1998 and 1999 in France, Germany, Spain, and Denmark, culminating in a conference in London in September 1999 to review the lessons of the project.

It would be important that this study should address the major equity issues existing in the large Australian cities, in respect of access to lifelong learning opportunities by disadvantaged sections of the community, including deprived and homeless youth.

While this recommendation is addressed to ANTA, there may be a need for consultation upon whether this study is best funded by ANTA, NCVER, or DETYA.

Recommendation 14
a That ANTA fund a study involving a set of case studies to examine issues and opportunities in the application of the Learning City strategy in Australian metropolitan contexts.

b This study should have regard to international trends in Learning City development and the special needs of individuals and groups disadvantaged in access to lifelong learning opportunities.

Other strategic partnership development

While we have regarded the learning community/Learning City strategy as the most fertile way at present in which to foster strategic partnership development for lifelong learning, other proposals in this report relate to this critical need.

These include our proposal in recommendation 4 for development of small business learning networks. It is likely that similar principles will be found to apply in developing such learning networks as in learning community/Learning City development. The connections between these forms of learning community and strategic partnership development should be monitored by interested stakeholders with active dissemination of insights and lessons.
Addressing the barriers

While the recommendations set out above will provide valuable insights into ways of addressing the barriers identified above, two critical barriers identified in this study will also need to be addressed. These are:

- funding policies and priorities which inhibit partnership
- cultural and philosophical differences between the sectors of education which also inhibit partnership

While we have excluded funding issues from the scope of this study, we recommend in chapter 16, that a follow-up study of funding issues should be undertaken. Funding barriers to strategic partnership development for lifelong learning could be brought into that study.

The case studies showed that cultural and ideological differences between the sectors of education continue to inhibit partnership and the working of lifelong learning opportunities.

In the Ballarat case study, for example, although the TAFE and higher education sectors now both come within the University of Ballarat, attempts to identify and strengthen pathways proved difficult. Professor Candy concluded in this study that ideological differences between TAFE and higher education, as well as differences in course structures and funding, have inhibited this process.

This is clearly an area where cross sectoral relationships and partnership building need further attention. On the other hand, developments in Wodonga suggest grounds for optimism. A critical question will be whether collaborative strategies such as the Learning City approach can address these barriers over time and lead to the conditions that foster effective strategic partnerships for lifelong learning in a learning society.

Encouraging new forms of partnership

In a knowledge-based economy, innovation is a key to success. The need therefore exists for innovation in the forms of strategic partnership that are developed to meet the objectives discussed in this report.

This need has been recognised in the British government’s Green Paper on lifelong learning, where the Uff is described as a new form of public/private partnership. While the development work for Uff is being publicly directed and funded, learning centres, which will have a key role in delivery, will be franchised to private bodies to operate.

We envisage that the learning community developments we have recommended in this report (e.g. Learning City, learning region) will stimulate new forms of partnership in meeting the objectives of the community. For this reason it is highly desirable that such development be closely monitored with a view to disseminating new ideas and approaches.

We also envisage local and regional strategic partnerships as a key instrument for addressing each of the challenges discussed in Part 3 of this report.
Notes

1 See OECD 1998b.
2 See chapter 6.
3 Secretary State for Education and Employment 1998a, pp.18–21.
Achieving equity in a learning society

Unless counter measures are adopted, the expansion of lifelong learning opportunities in a ‘free marketplace’ will increase inequality between individuals and social groups.

(OECD 1996)

Almost everywhere: surging inequality.

(Thurow 1996)

Confronting the equity challenge of lifelong learning is one of the keys to progressing the transition of Australia towards an inclusive learning society with lifelong learning opportunities for all.

This challenge resides in the growing polarisation in society between those who are ‘learning rich’ and able to cope with the rapidly changing conditions and uncertainties of the New World, and those who are ‘learning poor’ and unable to adjust to these conditions. The threat of a ‘two-thirds society,’ with its human, economic, and social costs, is present in this stark polarisation.

This danger of an emerging underclass unable to cope with contemporary conditions have received wide comment, and is posed in stark terms by Davidson and Rees-Mogg:

As the economies of more countries more deeply assimilate information technology, they will see the emergence—so evident already in North America—of a more or less unemployable underclass.

(Davidson & Rees-Mogg 1997, p.214)

Achieving a capability for lifelong learning for all, as defined in chapter 5, is central to a range of national objectives and aspirations. These include maintaining employability for individuals in conditions of exponential change, personal fulfilment and quality of life, building community and an inclusive society, and the economic competitiveness and success of Australian enterprises.

In the longer term, this challenge will largely reside in the effectiveness of Australian schools in producing students who are motivated self-directed learners. For the present, the legacy of past failures in schooling remains to be addressed—a theme frequently pointed out in our consultations across Australia and in the Sydney seminar.

This is an international problem that George Papadopoulos comments on in his Overview of International Trends, where he cites the significant minority of young people—around 15-20%—who continue to leave school without having acquired any recognisable skills or qualifications for entry into working life or further study. We agree with his conclusion that, in the context of lifelong learning strategies, combating school failure remains, more than ever, a top priority.
There is, therefore, a major intergenerational equity challenge in addressing the inequities that exist in society—as a legacy of the past and a range of structural and cultural barriers—between those with lifelong learning motivation and capability (the two-thirds majority) and those with neither this motivation or capability (the one-third underclass).

Some dimensions of the challenge

We discussed in chapter 5, a number of the indicators of participation in learning and the associated attitudes to learning in the adult population. While useful progress has been made in recent years, Australian statistics on post-school learning activities, and attitudes to learning, are not yet sufficiently developed to provide a basis for a precise assessment of the size and dimensions of the challenge.

Nevertheless, the general lines are reasonably clear:
- participation is influenced by socio-economic status, age, prior educational experience and qualifications, employment status
- the lowest level of participation is found with unemployed persons, those not in the labour force, employed as labourers or operative/drivers, or holding no post-school qualification
- a low level of functional literacy exists for much of the population

This pattern of non-participation is underpinned by negative attitudes towards learning which are frequently the outcome of unfortunate school experiences and an absence of perceived relevance of learning.

Three key objectives

In our discussion paper we included two core equity objectives in the ‘five key dimensions for lifelong learning in a learning society’ identified in the paper. These were:
- foundations for all
- strengthening and developing pathways, bridges and transitions

We found general agreement in the consultations on the centrality of these objectives, so we re-affirm their significance. In the light of the overall conclusions of this study, we now propose a third key-objective for equity: re-orienting equity strategies to lifelong learning objectives: foster a learning approach to equity.

We comment on these objectives below.

Foundations for all

The question of the foundations for lifelong learning has received considerable attention in the work of the OECD, which is reflected in the report of the 1996 OECD Ministerial Meeting on Lifelong Learning.

The unresolved issues in this area are discussed by OECD in this report, while also recognising that ‘there is a consensus that all children must master a core of essential knowledge and skills, and acquire the values and attributes that prepare them effectively for adult life and the world of work and continued learning.'
However, 'few empirical studies have been conducted with the aim of identifying the skills that constitute a common core of competence in a learning society.'

We addressed this question in our discussion paper where we suggested that a capability for lifelong learning involved a mix of core foundations, generic learning competencies (key competencies), and values and attitudes.

These dimensions are illustrated in figure 2 in chapter 5 where the dimensions include:
- values and attitudes—curiosity, self-esteem, desire for learning, etc.
- core foundations—literacy, learning to learn skills, understanding others, etc.
- generic competencies—problem solving, team skills, using technology, etc.

We found in our consultations no significant dissent from this analysis. Consultations with those involved in equity programs confirmed the significance of values and attitudinal factors including motivation and self-esteem. A review of ANTA equity projects undertaken this year showed that many funded equity projects addressed attitudinal barriers to participation with the intention of opening up motivational pathways.

The two reviews of ANTA equity projects and strategies undertaken this year have shown a substantial consensus on the elements of successful equity strategies. While equity projects are usually successful where special project funding is available, the challenge is to mainstream equity so that equity objectives are achieved within the boundaries of normal day-to-day VET operations. We discuss this question below.

The literacy challenge

A particular challenge in achieving the objective of foundations for all resides in the low level of functional literacy existing in a significant proportion of the Australian population. This appears as a major barrier to lifelong learning in Australia, maintaining employability, and the aspiration for an inclusive society.

In 1994, OECD initiated an international project to obtain comparative country data on literacy. This project—the International Adult Literacy Survey (IALS)—provides a novel approach to measuring the human capital stock by assessing the skills of adults directly, instead of the indirect assessment through educational qualifications or years of schooling.

A common methodology was developed and coordinated through Statistics Canada, with Australia participating through a survey conducted by the Australian Bureau of Statistics (ABS). This led to two ABS publications which provide significant information on the literacy challenge in Australia.

The IALS was assessed in three literacy domains and at five levels. These are shown below.

The IALS identified literacy skills to cover demands at work, in the home and the community. Each literacy domain is divided into five task levels of varying difficulty:
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| **Prose literacy:**
the knowledge and skills that are required to understand and use information from newspapers, fiction and expository text | **Level 1:**
able at most to locate a single straight-forward piece of information in simple written materials |
| **Document literacy:**
the knowledge and skills that are required to and use the information contained in official forms, timetables, maps and charts | **Level 2:**
able to locate pieces of information based on simple matching requiring a low level of locate inference |
| **Quantitative literacy:**
the knowledge and skills that are required to apply mathematical operations in printed materials | **Level 3:**
able to use written materials making low-level inferences taking account of multiple pieces of information |
| **Level 4:**
able to perform multiple-feature or less straightforward tasks using complex information | **Level 5:**
able to perform complex tasks combining several pieces of information that must be searched for in the written material |

The Australian results compared with a number of other OECD countries are shown in figures 4 and 5 for the following aspects:
- Figure 4—Adults performing above and below an adequate threshold of literacy, 1994–95.
- Figure 5—Literacy levels of workers in different economic sectors, 1994–95.

The disturbing Australian performance on these assessments points to the magnitude of the literacy barrier to lifelong learning in the adult population. This is in line with OECD observation that the proportion of the population performing at levels 1 and 2 can be taken to represent a shortfall relative to the desirable minimum.10
Figure 4: Adults performing above and below an adequate threshold of literacy 1994-95

A. Percentage below the threshold (literacy level 1 or 2 on the document scale)

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B. Percentage below the threshold (literacy level 3, 4 or 5 on the document scale)

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Note:
Countries are ranked by percentage of 16-65 year olds at literacy levels 1 or 2. A high proportion of adults, especially older ones, lack the literacy skills needed in knowledge-oriented societies.

Source: International Adult Literacy Survey.

Achieving equity in a learning society
Figure 5: Literacy levels of workers in different economic sectors

A. Percentage with low literacy levels (1 or 2).

B. Percentage with high literacy levels (4 or 5).

Note:
Percentage of workers aged 16-65 with low (levels 1 or 2) and high (levels 4 or 5) literacy levels on document scale, 1994-95. Countries are ranked by the percentage of workers in manufacturing at literacy levels 1 or 2. The literacy shortfall is particularly high in some sectors such as agriculture, but it varies greatly in manufacturing.

Source: International Adult Literacy Survey.
Aspects to be noted include:
- the influence of age on performance with underperformance greatest in the 46-55 age group
- the variations between economic sectors with underperformance most evident in agricultural/mining and manufacturing

The high underperformance among older people supports the evidence from previous literacy studies that both depreciation and appreciation of skills takes place over the life cycle, so that low skills are not only associated with lack of education, but also with a lack of use of particular skills. This makes a compelling argument for lifelong learning.

The implications of the high underperformance in industry sectors such as agriculture/mining and manufacturing are serious in terms of the displacement of workers with structural changes in these sectors, and the need to reskill workers and maintain employability. With newly created jobs usually requiring higher skill levels, workers with low levels of functional literacy stand to be poorly placed in a context of exponential change and major industry restructuring.

Low levels of literacy in much of the adult population appears as a major barrier to equitable outcomes in the transition to a learning society.

There is little doubt that imaginative and innovative use of modern learning technologies can contribute much in addressing this problem, provided that adequate resources are available. We noted in the course of this study projects such as a Queensland study on Adult Literacy and New Technologies in Remote Communities, which have explored the potential of new technologies for literacy programs in a number of contexts.

Overall, we have concluded that addressing underperformance in functional literacy in the adult population is a priority need in progressing lifelong learning for all in Australia. Australia shares this need with most OECD countries, and George Papadopoulos reports—in his Overview of international trends, in Volume 2 of this report—upon heightened political interest following the results of these OECD literacy surveys which have shown that at least a quarter of the adult population fails to reach minimum literacy levels needed to cope adequately with the demands of everyday life and work.

**Strengthening and developing pathways, bridges and transitions**

There has been a substantial focus upon developing, pathways, bridges, and transition in VET reform over the past decade. Successive phases in this development have included the Finn Report of 1991, the pilot phase of the Australian Vocational Training System, New Apprenticeships, and the promotion of VET in schools.

The focus of this development has been on employment, and in particular transitions from education to and within the labour market. While a good deal has been achieved in this area, a number of issues remain. These issues, which were raised in our consultations, include the situation of various disadvantaged groups where a range of barriers continue to impede access to pathways and
progression through them, and broader issues relating to pathways and transitions in the emerging socio-economic conditions of the New World.

Improving pathways, bridges, and transitions was raised as a key area in our discussion paper. We found general agreement in the consultations on the significance of this area and the need for continuing attention, in particular towards the most severely disadvantaged individuals and groups. Deprived and homeless youth were often cited to illustrate the issues needing to be addressed.

A somewhat different theme in the consultations related to the need for a more diverse set of pathways and support provision, as a result of fundamental socio-economic change in Australian society in the emerging conditions of the New World. These changes are being accompanied by shifts in social attitudes, so that new patterns of work and non-work lifestyles are emerging which require a re-examination of the traditional linear education-to-work approach to pathways.

This line of comment was most common in consultations with the ACE sector, and was often made with regard to the situation of women in the conditions of the New World. This distinction has also been recognised by the OECD in the report on its 1996 Ministerial Meeting on lifelong learning, where it is accepted that the OECD work in this area has had a narrow focus on transitions to and within the labour market with an employment focus, rather than the broader links between transitions in lifelong learning, culture and democracy.

We have concluded that VET policy should continue to be directed at strengthening and diversifying pathways, bridges and transitions, with a focus on the needs of individuals and groups who are the most disadvantaged in accessing lifelong learning opportunities. This will require improved ways of identifying the extent of disadvantage that individuals experience.

There is a good deal of merit in the proposal of the Kennedy Committee in Britain on widening participation in further education, that 'New Learning Pathways' should be constructed for people 18 years and over who have low levels of attainment in education and training. The 1998 reviews of ANTA equity projects showed that much can be achieved when resources are focussed and imaginative strategies are applied by committed staff.

We also recognise, as does the OECD, that lifelong learning systems based upon enabling more individuals to construct their own pathways of learning, work, and social activity will require education and career guidance to be available on a continuing basis throughout life. We discuss this need in chapter 5, and address this requirement in recommendation 1 of this report.

Recommendation 5

a That the VET sector recognise the enhanced significance, in the context discussed in this report, of policies and strategies that are directed at foundations for all and which strengthen and diversify pathways, bridges, and transitions on a whole-of-life basis.

b Such policies and strategies should recognise the changing nature of work and non-work activity in Australian society so that personal fulfilment and community development objectives are linked to the pattern of vocational pathways.
Adopting a learning approach to equity

The third key equity objective identified in this report is that equity policies and strategies should be re-oriented to lifelong learning objectives. We have termed this a learning approach to equity.

Such an approach recognises the danger identified by the OECD that unless counter-measures are adopted, the expansion of lifelong learning opportunities in a ‘free marketplace’ will increase inequality among individuals and groups.17

We envisage a learning approach to equity in terms of the general approach and conclusions of this report. This would encompass:

- a commitment to lifelong learning for all as the core objective
- strategies that foster system learning at all levels, and a culture of continuous improvement
- improved network building and dissemination as a basis for enhanced dialogue between stakeholders and system learning
- priority to partnership and learning community strategies, so as to foster linkages and alliances to support equity objectives, and generally to provide incentives and support for individuals in becoming lifelong learners

The key role of strategic partnerships in the transition to a learning society is addressed in chapters 7 and 10, where we discuss a number of forms that such partnerships might take.

We envisage this general approach being adopted to advance equity objectives at all levels. At a local level, a learning community approach can provide an effective means of promoting equity objectives. This approach provides for community involvement, empowerment, the fostering of dialogue between partners, and can also provide incentives and support for disadvantaged individuals in accessing learning opportunities.

The review of ANTA equity projects demonstrated how the adoption of community development principles in equity projects could be an effective approach to equity objectives.18 The community developed approach has much in common with the concept of a learning community, and can be extended to meet on-going learning objectives.

The review of ANTA equity projects also demonstrated the need to move beyond an equity project approach to access objectives, ensuring effective system learning so that the lessons of equity initiatives are embedded in the day-to-day activities of VET.

This approach has much in common with the role of learning organisations, as discussed in chapter 6. If VET institutions and agencies are developed as learning organisations well linked to their environments and with the capability to adopt systems perspectives in their work, the lessons of equity initiatives would be embedded in the normal activities of these organisations.

Further, we take the position that the magnitude of the equity challenge means that only a national co-operative approach to equity is likely to be effective. Such an approach should be closely linked to policies and strategies to advance lifelong learning in Australia.
We illustrate some of the dimensions of a national co-operative approach to equity in figure 2. This shows:

- the role of equity projects
- the importance of system learning linking State and national agencies
- the carry through to general VET policies
- the importance of on-going promotion of lifelong learning, directed, in particular, at non-participating individuals and groups
- the key role of community bodies and partnerships

A national co-operative approach along these lines could do much to foster equity in lifelong learning opportunities.

Recommendation 6
That governments take account of the need to align their equity policies and strategies with the objective of lifelong learning for all and develop their policies and strategies with this orientation.

The role of technology

We have no doubt that technology could be a key instrument in extending learning opportunities to non-participants. This will require that the barriers to access by non-participants, including lack of confidence, be addressed through appropriate strategies.

Review of equity policies and strategies

The transition to a learning society carries with it the requirement that all stakeholders should review their equity policies and strategies to ensure the optimum fit with a lifelong learning environment. We envisage this requirement involving reviews by national and State government agencies, institutions, and community bodies with an interest.

In the case of ANTA, equity policies were reviewed in 1998 in the context of ANTA's new national strategy for the period 1998–2000.

With the major implications of lifelong learning for equity objectives, there would be much to be gained from a national conference on equity in the context of transition to a learning society being convened by ANTA during 1999. We see this as a national 'reflective process' that would consider the information provided by the 1998 equity reviews, and the implications of lifelong learning for equity, with a view to furthering a national co-operative approach to equity in the context of national lifelong learning objectives.

Recommendation 12
That ANTA convene a national conference on equity policies and strategies during 1999, to consider the implications of lifelong learning for equity strategies and the features of a national co-operative approach to equity that would address the identified issues so as to progress the objective to lifelong learning for all.
Meeting the needs of the third age

A neglected area of policy relates to meeting the learning needs of older people in the third age. The statistics cited in Part 2, Encouraging and supporting learners, show that participation in learning activities is conditioned by age, among other factors. In an ageing population, this represents both a waste of human resources, and a diminution of the quality of life for a significant section of the population. While there has been some support for initiatives, such as the University of the Third Age, more attention needs to be given to this area.

The waste of human resources in this respect attracted comment from Tom Schuller and Anne-Marie Bostyn in their study on Learning for the Carnegie Third Age Inquiry.
Attention to the needs of the third age has much to teach the rest of society. We need to acknowledge the interplay among all forms of learning, formal and informal, instrumental and expressive. But the potential of the third age as a source of skill, wisdom and creativity is a huge and immediately available resource. The investment required to tap it is by comparison, minuscule. For once, the long term and the short term coincide.

Meeting the learning needs of the third age can also offer a large resource for the development of Australia as a learning society.

Notes

1 Lutz 1994, p.108.
3 OECD 1996a.
4 Ibid., p.103.
5 Ibid., p.103.
6 Kearns & Grant 1998.
7 Ibid.
8 OECD 1998a.
9 ABS 1997a and 1997b.
10 OECD 1998a, p.23.
11 Ibid., p.24.
13 These comments arose, in particular, in the Melbourne consultation with the ACE sector.
17 Ibid., p.160.
18 Kearns & Grant 1998. See project Nos. 30 and 39 in Volume 2 for examples of such projects.
12 Using technology wisely

A revolutionary confluence of technological changes has set the stage for a new environment that will empower individuals as never before.

(John Naisbit, The global paradox)

In a world increasingly dominated by technology, emphasis must be placed on ways both to use technology in the service of education and to prepare people to master it for living and working.

(UNESCO 1996)

While the industrial revolution created a division between the spheres of working and personal life, the information technology (IT) revolution may be reintegrating them, moving some of the most fundamental boundaries which distinguish our cultures.

(OECD 1996a, 'Philadelphia roundtable')

It is evident that one of the main driving forces towards a learning society resides in the role and power of modern information and communication technologies. While the power and potential of technology is clear, the challenge lies in using technology wisely to advance the educational and broader societal objectives of lifelong learning, to address the 'learning divide' discussed in chapter 11, and to progress Australia as an inclusive learning society.

It is also clear that the challenge is basically the human challenge, and not one of technology. The technology exists; the task is to harness this for educational, social, cultural, and economic purposes. In doing this, the challenge also lies in transforming education and training from their situation as 'the last of the cottage industries' to a system appropriate to the needs of the New World of the 21st Century.

In a dynamic information society where the rate of technological change is exponential, there is a problem for education and training systems in identifying and adapting to the potential of new technologies, so that education systems tend to lag in responding to technological change. This is a further element of the challenge.

Dimensions of the challenge

The challenge of technology for education has been delineated in a number of ways.

Our Sydney seminar saw the challenge as involving three sets of issues:
- issues impinging on learning
- issues impinging on systems
- issues relating to teachers, trainers and mentors
A recent OECD study on adult learning in a new technological era found a 'triple challenge':

- the access challenge—making programs accessible for adults, attracting students to programs;
- the outcomes challenge—an education that is modern, appropriate and effective, preparing students to understand and use technology in other phases of life;
- the challenge of spiralling costs.

We recognise that the challenge of using technology wisely to advance lifelong learning in a learning society encompasses all the issues identified in the OECD study and in our Sydney seminar.

It therefore encompasses a broad spectrum of issues including:

- how to adapt education and training systems and practices to the challenge of using new technologies wisely and well;
- how to clarify the relationship between adult learning and technology—can modern technologies 'empower individuals as never before'?
- how to maximise the role of technology in advancing equity objectives—particularly in regard to non-participating groups who often lack confidence in the use of technology;
- how to optimise cooperation between institutions and systems so that necessary cost efficiencies are achieved and new ideas flow easily;
- how to ensure the quality of content;
- how to adopt funding models so that the effective use of learning technologies is encouraged and optimised;
- how to adapt professional development of teachers to the new environment of modern learning technologies.

This is a broad spectrum of issues that we are not able to discuss in any detail in an overview report of this nature. Rather, we wish to flag the critical importance of using technology wisely and well, and to comment upon some of the linkages between the use of technology and the other principal themes discussed in this report.

**Understanding and using technology**

*This technological revolution is clearly vital for an understanding of our modern world as it is creating new forms of socialisation and even new types of individual and collective educating.*

(UNESCO 1996)

*But new technologies alter beliefs as well as offering new choices.*

(Thuròw 1996)

In addition to the issues identified above, VET faces a critical challenge in ensuring that all students acquire an understanding of the role and impact of technology in modern society, and competence in using technology. While using technology has been incorporated into the key competencies, it is also important that they acquire an understanding of the social and economic impact of technology, including 'the interplay and growing interdependence among the forces of technology, learning, and the workplace.'
This is an area where experiential learning and the adoption of active learning strategies, as discussed in chapter 14, can be valuable in assisting students to acquire an understanding of the social and economic effects of technology, as well as competence in using technology.

The diverse roles of learning technologies

A key aspect of the role of modern learning technologies is that they enable changes in the methods and resources that are used in learning. They offer a means of transforming the work of education institutions and systems. Further, because the new technologies are empowering (for individuals, institutions, and systems), they create choices for educators and learners. Responding to the choices offered is an important aspect of the challenge of technology.

The choices offered include the ways in which learning occurs. The OECD study of adult learning and technology comments on ways in which technology enables improvement in four types of support for learning:

- real-time conversation by a pair of people or a small group
- time-delayed conversation
- learning by doing
- directed instruction

While traditional educational programs can use all four of these learning supports, the role of new technologies can extend the opportunities for creative combinations that enrich the education provided and which serve to empower the learner.

Because modern information and communication technologies are essentially learning technologies rather than teaching technologies, they can be powerful instruments in empowering learners and progressing lifelong learning.

An emerging new paradigm for education and training?

So pervasive are the effects of modern technologies, that it has been suggested that we are witnessing the beginning of a new paradigm for education and training that will shift the focus from teaching to learning.

The emerging paradigm has been defined in a number of ways. The OECD study of technology and adult learning describes the shifts in terms of a new pair of educational paradigms emerging to join the older pair.

Traditional

- Campus bound—Education is provided within the boundaries of an institution.
- Distance education—There is one-way transmission of directed instruction from the campus to the individual student.

Emerging

- Campus based—There is a productive learning environment for students both on-campus and off-campus with off-campus contexts used for learning.
- **Distributed learning programs**—Participants and learning resources (teachers, mentors, etc.) are physically dispersed but are intimately connected by electronic networks. These programs provide rich support in the four dimensions of learning cited above.

These paradigms are illustrated in figures 7 and 8. Table 5 summarises access, outcomes, and cost aspects of the four types of learning support discussed above.

We have observed in our consultations across Australia, and in the case studies, various indications of shifts from the traditional campus bound and distance education paradigms.

These shifts include the development of new approaches, such as 1) the Virtual Campus and associated learning network development in Victoria, 2) the role of technology based networks such as Western Australian telecentres, and 3) more recently with the Tasmanian Community On-line Access Centres and the work of the Queensland Open Learning Network.

Figure 7: The great convergence

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Campus-bound paradigm
Clash of values
Distance teaching paradigm
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Figure 8: The two new paradigms

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<th>Campus-based programs</th>
<th>Distributed learning programs</th>
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<td>Infrastructure for integrated access</td>
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<td>Common foundation of technologies, the four supports and teaching-learning practices</td>
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The two new paradigms rest on a common foundation of technologies and techniques used by both. Distributed learning programs also need infrastructure for integrated access in order to reach truly distant learners.

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<td><strong>Real-time conversation</strong></td>
<td>• include more learners, and more types of learners (and instructors)</td>
<td>• Include more types of learners and instructors</td>
<td>• Students of more help to each other as time-delayed exchange can be better shared</td>
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<td>• Reduce time needed by eliminating some or all commuting time</td>
<td>• Increase the frequency of feedback</td>
<td>• Can reduce need for physical facilities solely dedicated to education</td>
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<td><strong>Time-delayed exchange</strong></td>
<td>• Include more learners, and more types of learners, and instructors</td>
<td>• Conversation that involves different types of learners</td>
<td>• Supporting campus based model, reduces need for physical facilities dedicated to education</td>
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<td>(for example students whose native language differs from that of the instructor or classmates, and distant students)</td>
<td>• More students feel comfortable speaking</td>
<td>• more use of advanced students to aid instruction</td>
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<td><strong>Learning-by-doing</strong></td>
<td>• Use of simulations and other software so that students can study where and when they need to</td>
<td>• Use of simulations to provide practice and more flexibility in research (for example business games described in chapter 3)</td>
<td>• Single worldware packages can be used by learners over many courses</td>
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<td>• Use of telecommunications to link students (for example nursing students, who are learning at a hospital yet getting directed instruction from a university)</td>
<td>• Vast improvements in amount of electronically stored information, and speed of search and retrieval</td>
<td>• Simulations cheaper, more feasible, less risky than using real equipment only</td>
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<td>• More learner control over when, where to use the directed instruction (for example watch video, read print, use based instructional materials at times and places of one's choice of students choice)</td>
<td>• Use of video and computers to record and critique student performance</td>
<td>• Relatively low cost of certain forms of electronic publishing (for example global publishing on the web)</td>
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<td><strong>Directed instruction</strong></td>
<td>• Improved ability to study ('rewind') the lecture</td>
<td>• Economies of scale, analogous to enlarging lecture hall or printing more copies of a textbook</td>
<td>• Multi-use studios can be shifted among departments as enrollment rises or falls</td>
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<td>• New types of information for study (for example video from France when learning French)</td>
<td>• Reduced need for expensive lecture halls</td>
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We comment on some of these developments in chapter 7, as strategies for building learning communities. The role of modern technologies in building networks of learning communities is one of the key areas for development that we have identified in this report. The role of developments such as the Victorian Virtual Campus in contributing to this pathway towards a learning society will be important.

An overseas example of this kind of learning network development may be observed in the concept and features of the British University for Industry. Ufi will operate as a national network with franchised local learning centres linked to the network in a wide range of contexts. In this way technology will be integrated with individual and community development on a lifelong basis. The role of Ufi will be supported by the National Grid for Learning which will enable teachers and students to gain access to a wide range of learning materials on-line.9

The access challenge

The major equity challenge posed by lifelong learning is discussed in chapter 11. A key aspect of the ‘learning divide’ in society is the division between those with the capability to use modern technologies and those lacking the confidence, motivation, and knowledge to use modern technologies.

This polarisation reinforces existing inequalities in society and poses the danger that the expansion of lifelong learning ‘will increase inequality between individuals and social groups.’10

This danger was recognised by the Goldsworthy Information Industries Task Force in their 1997 report on the Global Information Economy:

*As we move into the 21st century the ‘creative destruction’ wrought by technology will be even greater than it has been over the last 200 years. If the unskilled worker and the young are not educated or redirected there will be significant increases in inequity, with all the social costs that imposes. The solution is education.*

(Information Industries Taskforce 1997)

Combating this danger will require proactive policies and strategies that:

* make instructional ‘access’ programs widely available to adults
* attract students, especially non-participants, to these programs

The 1998 review of ANTA equity projects showed that local community-based programs could be effective in attracting people with little experience in technology to these programs.11 The experience of the Queensland Open Learning Network and Western Australian telecentres with local community-based programs supports this assessment,12 as does the more recent Tasmanian experience with its network of Community On-line Access Centres.13

Similarly, in Europe a range of innovative programs have been funded by the European Union under its EUROTECNET program.14 Innovative approaches adopted by local centres, such as the Notting Dale Technology Centre in London, have illustrated how the needs of disadvantaged groups such as unemployed adults can be met through locally based programs.16 The Notting Dale programs provide basic ‘access’ knowledge and skills, and then open vocational pathways.
There is a need, then, to expand the provision of local community-based programs along the lines of the Georgetown learning centre and the London Notting Dale Technology Centre; such institutions provide introductions to basic computing skills then open up pathways to more advanced skills, as does the Tablelands On-line project. Such provision could be aligned with the learning community development recommended in chapter 7 of this report.

Recommendation 7
a That national and State VET authorities note the need to expand the provision of local community-based programs that provide easy supported access to computing skills for individuals and groups lacking this capability and which open pathways for the acquisition of more advanced knowledge and skills.

b The value of networks of local learning centres in meeting this requirement should be noted.

Building an infrastructure for integrated access

Recommendation 12 draws attention to the importance of an infrastructure to provide a basis for integrated access to computing and other technology-based skills. In some States this infrastructure exists through such networks as the Queensland Open Learning Network and Western Australian telecentres—although on-going funding is often a problem. In other States, special project funding has stimulated local provision, with VET providers having varying roles.

The British Ufi illustrates the concept of an integrated national system of local learning centres, which will provide an infrastructure for integrated access and which will link to a range of support services. It will be important to review the adequacy of the existing infrastructure for integrated access across all States and Territories, including the requirement for 'brokering' institutions or networks to ensure that access is progressively extended.

Professional development of teachers, trainers, and mentors

One of the key issues identified by the Sydney seminar was the need for professional development of teachers, trainers, and mentors in the appropriate use of learning technologies. This issue was also identified by the OECD in its study of adult learning and technology and in the report of the 1996 Ministerial meeting on lifelong learning. Staff attitudes and deficiencies in understanding and knowledge can be major barriers to effective use of learning technology; thus, adequate professional development is essential. Strategies recommended in this report, such as the learning organisation approach, can be a valuable way of integrating professional development in respect of new technologies with broader change strategies to support lifelong learning.
The content issue

One of the issues identified in the Sydney seminar related to content in respect of the uses of learning technologies. It was pointed out that priority was usually given to infrastructure development so that content received a lesser priority. We agree with this comment and recognise that high quality content is essential if the full potential of technology in advancing lifelong learning for all is to be achieved.

Technology and change

A key aspect of the challenge of technology for VET systems is keeping up with the pace of change in technological innovation, so as to be able to assess the educational implications of new technologies.

The educational uses made of the Internet and the World Wide Web in recent years illustrates the pace of change in the moving frontier of technology. It is virtually impossible for educational systems to operate on the basis of cutting edge technology, so that introducing the technological foundations of modern education is of necessity an evolutionary process.

We have observed this process in, for example, the development of the Virtual Campus concept in Victoria—and we agree with this approach. In this context, there is a strong case for exchanges of information and experience between VET systems.

Technology and the Learning Age

Technology is one of the main driving forces towards the Learning Age in which learning will be widely diffused through society. It is therefore critical that educational and social thinking keep abreast of the frontier of technological advance. We envisage the strategies recommended in this report—such as the learning community and learning organisation approaches—to be ways in which organisations, institutions and communities can respond and adapt to change, so as to harness technology as a partner in the drive towards the learning society.
Notes

1 Spring 1998.
2 Seminar held in Sydney on 25 November 1998. See appendix 5 for report on seminar.
3 OECD 1996b, pp.11-21.
7 Ibid., p.35.
8 Ibid., p.95.
9 Secretary of State for Education and Employment 1998a, p.23.
10 OECD 1996a.
11 Kearns & Grant 1998.
12 See, for example, Tableland On-Line, as an example of a successful localised program.
15 Ibid., pp.89-110.
16 Kearns & Grant 1998, Volume 2, Project No.36.
17 OECD 1996b, p.144.
18 OECD 1996a, p.211.
Today knowledge and skills now stand alone as the only source of comparative advantage. (Thurow 1996)

Knowledge navigators and lifelong learners: producing graduates for the Information Society. (Candy 1991)

In a global economy, knowledge may be a company's greatest competitive advantage. (Davenport & Prusak 1998)

The centrality of learning and knowledge to modern economic activity and prosperity is increasingly recognised. (OECD 1996a)

It is now a commonplace to say that the global economy has shifted from an industrial and service economy to a knowledge-based economy where the generation and use of knowledge is a prime source of competitive advantage.

This recognition is enshrined in the current work of international agencies such as the OECD and UNESCO and in policies of the European Union to fashion a 'Europe of Knowledge'.

In an era of 'man-made brainpower industries,' skills, knowledge, and human capital are pre- eminent as the basis for competitive advantage.

When OECD Labour Ministers met in October 1997, their communiqué 'stressed the importance of lifelong learning as a determinant of long-term growth in a knowledge-based economy'.

The British government's Green Paper on lifelong learning is also based on linking lifelong learning with the requirements of a knowledge-based global economy:

Investment in human capital will be the foundation of success in the knowledge-based global economy of the twenty-first century. (Secretary of State for Education and Employment 1998)

The emergence of a knowledge-based economy raises a broad spectrum of issues involving relationships between learning, the generation and use of knowledge, innovation, and commercial outcomes. It poses the question of whether it is now necessary for VET to move beyond the current focus on skill and competence, so as to respond to the requirement of preparing students to be effective in a knowledge-based economy. It raises further issues relating to the development, use, and measurement of human capital.
Knowledge in a world of blur

We comment in chapter 1, Introduction, upon the speed of change on a connected economy producing a world of blur in which traditional boundaries are disappearing.

Old distinctions between manufactured objects, services, and ideas are breaking down. Not surprisingly, distinctions between manufacturing and service firms are disappearing too. (Davenport & Prusak 1998)

It is necessary for VET to respond to the challenge of this world of disappearing boundaries and blur.

Data, information and knowledge

The growing importance of knowledge in the global economy means that it is important to clarify the distinctions between data, information, and knowledge.

We have defined these terms in the following way: 4

- **Data**: A set of discrete, objective facts about events. Data includes texts, facts, interpreted images and numeric codes that have not yet been interpreted.

- **Information**: Data that is imbued with context and meaning.

- **Knowledge**: A fluid mix of framed experiences, values, contextual information, and expert insight that provides a framework for evaluating and incorporating new experiences and information.

The levels from data to knowledge are sometimes seen as a value chain and hierarchy of knowledge. This view has been formulated by Liebowitz and Beckman in their work as knowledge organisations, and is represented in the figure below.

Marquardt comments that as one goes up the hierarchy, there is an increase in breadth, depth, meaning, conceptualisation and value. 5 This means that the process of creating knowledge in an organisation is a value adding process.

The concept of knowledge outlined above means that it is a mixture of various elements: it is fluid as well as formally structured, it is intuitive as well as rational, and it reflects 'human complexity and unpredictability.' 6

*Figure 9: Hierarchy of Knowledge*

This view of knowledge supports our concept of the attributes of a lifelong learner as set out in chapter 5. Attributes such as an inquiring mind and curiosity, a repertoire of learning skills, information literacy, and personal mastery, will be increasingly important for knowledge workers in the Learning Age. VET must respond to this requirement.

A key aspect of the concept of knowledge set out above, is the role that values and beliefs play in the generation and use of knowledge.

This is recognised by Davenport and Prusak:

> Values and beliefs are integral to knowledge determining in large part what the knower sees, absorbs and concludes from his observations.

(Davenport & Prusak 1998)

This view is supported by Nonaka and Takeuchi:

> Knowledge, unlike information, is about beliefs and commitment.

(Nonaka & Takeuchi 1995, p.58)

The implication of this view for VET points to the necessity for values to figure more prominently in VET provision than has been the case over the past decade of training reform. We take up this question in our comments on values integrating education in chapter 14.

'Towards a Europe of Knowledge'

The growing importance that enterprises and governments around the world are now placing on the production, dissemination, and use of knowledge, is reflected in action taken by the EU to develop a 'Europe of Knowledge' 11 This has now become one of the four pillars of EU activity which is reflected in the 1997 White Paper, Towards a Europe of knowledge, which sets out guidelines for EU action in the areas of education, training and youth for the period 2000-2006.

> Real wealth creation will henceforth be linked to the production and dissemination of knowledge and will depend first and foremost on new efforts in the field of research, education, and training and our capacity to promote innovation. This is why we must fashion a veritable 'Europe of Knowledge.' This process is directly linked to the aim of developing lifelong learning.

(Commission of European Communities 1997)

The links between lifelong learning and the generation of knowledge were also incorporated in the EU Amsterdam Treaty with the determination, 'to promote the highest level of knowledge for its people through broad access to education and its permanent updating.'

Some dimensions of the challenge

The overview set out above points to a number of the key dimensions of the challenge in responding to the requirements of a knowledge-based economy and information society.

These include:

- fostering the linkages between lifelong learning and the generation and use of knowledge for commercial purposes
preparing VET students to be knowledge workers in a knowledge-based economy
developing strategic partnerships to foster the generation and use of knowledge, for example networks of small businesses
assisting enterprises to value, develop, measure, and use human and intellectual capital for commercial purposes

A number of the strategies discussed in this report have value in progressing these objectives. These include:
- developing VET institutions as learning organisations
- assisting enterprises to develop as learning organisations
- developing learning communities, for example networks of firms as communities of practice
- forging strategic partnerships of all kinds

Coherent policies for lifelong learning will help to forge the necessary linkages between action taken in these various contexts.

It appears probable that a wide range of issues will need to be addressed by industry and the VET system, in the process of adjusting to the needs and requirements of a knowledge-based economy. A recent study by Anderson Consulting on the use of knowledge workers in industry in Asia suggests that old Taylorist habits and attitudes based on management by control are hindering the effective use of knowledge workers. This stifles creativity and innovation, and is undermining the key attributes required for success in a knowledge-based economy.

The Anderson Consulting study concluded that this 'new breed of high skill workers' require autonomy in the way they tackle work so that they can cope with uncertainty and complexity which is the hallmark of the emerging era.

This study supports our view that the VET sector should give priority to meeting the needs of knowledge workers in the Learning Age, and to assisting industry to adapt to these new requirements for success. It also supports the case, which we set out in chapter 6, for enterprises developing as learning organisations as a way of coping with changing conditions.

Lifelong learning and the generation and use of knowledge

Marquardt, in his work on the learning organisation, makes a distinction between the acquisition and creation of knowledge.

Firms may acquire knowledge in various ways. The acquisition of knowledge from the external environment may proceed from hiring staff, benchmarking from other organisations, published sources, hiring consultants, and other methods.

However, generating or creating knowledge within an organisation links knowledge more directly to learning within the organisation. Whereas knowledge acquisition is usually adaptive, knowledge creation is generative and directly related to the capability of the organisation for learning. Hence, one of the objectives of building a learning organisation is to achieve an organisation that generates new knowledge in the normal course of work. This requires staff with the capability for lifelong learning, as discussed in chapter 5, the fostering of team
learning, and the development of systems to capture, manage, and use new knowledge generated from within the organisation.

Learning must be captured and collected in systems to keep what is learned in the organisational memory. (Watkins & Marisc 1993)

New knowledge can be generated from learning in the workplace at a number of levels. These include teams, institutions, enterprises, networks, and clusters of enterprises.

An interesting example is provided by clusters of firms which are increasingly being used as an innovation strategy in regional economic development. Such clusters of firms are rightly seen by Martinez as learning systems. The outcomes of industry clusters depend largely upon the quality of the interaction and learning between the members of the cluster, and the quality of learning by the cluster from its external environment. There are sound reasons to apply learning principles to the work of such clusters of firms.

Examples are also given, in chapter 6 and 7, of the development of networks of firms as learning communities (communities of practice). There is little doubt that building networks of collaborating firms can be used to generate new knowledge and stimulate innovation.

Learning, generating knowledge and innovation

The links between learning in the workplace, the generation of knowledge, and innovation, have attracted growing attention in the context of the shift to a knowledge-based economy.

Martinez sees a direct link:

There is little doubt that the learning process is central to innovation.

(Mitra & Formica 1997)

The OECD recognises that there are issues that need to be examined:

There needs to be a clearer picture of the relationship between economic performance at regional level and its links to learning and knowledge.

(OECD 1998b, p.10)

Mitra and Formica, in their study of university-enterprise partnerships in innovation and economic development, emphasise the development of a wider knowledge network in which university/enterprise interaction occurs. There has been little research on the role of VET institutions in this pattern of learning-knowledge generation-innovation—and research in this area is needed.

Preparing VET students to be knowledge workers

VET institutions face a complex challenge in preparing students to be 'knowledge navigators and lifelong learners'. This will require a fundamental re-appraisal of the work of VET institutions which we discuss in chapter 14.

Eminent voices around the world have questioned whether education systems have yet adjusted to the needs of a knowledge society and lifelong learning.
These voices include Peter Drucker, and the British Royal Society (RSA):

*In the knowledge society, education will have to transmit ‘virtue’ while teaching the skills of effectiveness. At present our educational systems do neither, precisely because we have not asked: 'What is an educated person in the knowledge society.'* 

(Drucker 1990, p.236)

*We conclude that we are still preparing people for a world that is fast disappearing. A new education philosophy is essential, and a new system that grows from it to meet the needs of a knowledge society.* 

(Bayliss 1998, p.68)

These conclusions contain the common charge that education institutions and systems have not examined closely the needs of people and enterprises in a knowledge society. Meeting the needs of a knowledge society will require the VET sector progressing beyond a focus on skill and competence to educate people much more broadly to be effective as self-directed learners in a knowledge/society. This will require fostering the attributes that we set out in our profile of a lifelong learner in chapter 5, including a capability to understand and respond to values.

The links between values and the generation of knowledge are discussed above. As a key dimension of a knowledge society, it will no longer be feasible for VET and the other education sectors to neglect values as marginal to their work. A constant preoccupation for the VET sector must now be the Drucker question: ‘What is an educated person in the knowledge society?’

It is also necessary to realise that more and more of the workforce are becoming knowledge workers as firms change their work methods, often in response to new technologies. Philip Candy points out how even in conventional industries many process workers are becoming knowledge workers, as production processes and workplaces are increasingly controlled by computers. As the ‘informated’ workplace (or high performance workplace) becomes increasingly common, VET students will need to be prepared to be flexible and effective in this environment as knowledge workers.

We comment further on this question in chapter 14.

The implications of a knowledge-based economy raise important questions for ANTA which need to be examined. These include whether the current approach to competency-based training requires modification or further development. Whereas current training arrangements and practices evolved in response to the needs of an industrial and service economy for skill, a knowledge-based economy in a context of globalisation and exponential change requires other attributes as well for commercial success.

These attributes are discussed at various places in this report, and are included in our profile of a lifelong learner given in exhibit 4. It is abundantly clear that the requirements to develop effective knowledge workers who are able to perform at high levels in a knowledge-based economy, warrants careful study by VET authorities.
Recommendation 8
That ANTA review the implications of the emerging knowledge-based economy, and associated socio-economic changes, for the work of the VET sector—including the question of whether the current approach to competency-based training requires modification or further development.

Developing strategic partnerships to generate and manage knowledge

A central theme of this report has been the necessity to forge strategic partnerships to foster lifelong learning. This requirement applies equally to the needs discussed above, in meeting the requirements of a knowledge-based economy.

A number of examples are given in Part 2 of this report, of learning communities of various kinds being forged that stimulate the flow of information and ideas, and the generation of knowledge.

In an era where knowledge is being created at an unprecedented rate, and where many fields of knowledge converge with new fields created, the case for collaboration and partnership in generating, managing, and using knowledge is compelling.15

The growing significance of networks of knowledge is a key factor in building competitive advantage and effectiveness in a knowledge-based economy and is one of the new realities for VET.

Various examples are given in this report of such networks. These include:

- clusters of firms forged by regional economic development authorities as an innovative strategy, operating, in effect, as learning systems and knowledge-generating systems16
- at a system level, the concept of a national co-operative strategy for equity which would function as a knowledge generating network 17

These examples illustrate how knowledge networks can be developed at various levels: within organisations and institutions, between enterprises (for example value chains as well as industry clusters), and in State and national systems.

At a national level a number of knowledge networks already exist with varying degrees of structure and formality in the arrangements.

These include:

- equity networks
- learning technology networks
- research networks

In responding to the needs of a knowledge society, it will be important to strengthen the role of these knowledge networks and extend their impact and influence. The role of the strategic centre of such networks will be important in extending the impact of these networks.18
Network development along the lines discussed above will stimulate and further the 'dance of knowledge' in a knowledge society. ¹⁹

Assisting enterprises to value, develop, and use intellectual capital

*Productivity growth depends increasingly on the knowledge and know-how that workers bring to the job and their capacity to acquire and apply new information and competencies.*

(OECD 1996a)

A further key aspect of a knowledge-based economy resides in the enhanced role that intellectual capital now plays in influencing economic success. The available evidence suggests that this is a neglected area in Australian industry.

There is a growing international recognition of the influence of human capital and intellectual capital in a knowledge-based economy. This is recognised in the work of the OECD, and in an enhanced interest in the measurement of human and intellectual capital.

*As we move into 'knowledge-based' economies the importance of human capital becomes even more significant than ever.*

(OECD 1998a)

This interest raises a spectrum of issues involving the relationship between lifelong learning and human capital investment, depreciation, and renewal in a knowledge-based economy. ²⁰

Human and intellectual capital

A distinction is sometimes made between human and intellectual capital.

The OECD defines human capital in the following terms:

*The knowledge, skills, competencies and other attributes embodied in individuals that are relevant to economic activity.*

(OECD 1998a, p.8)

However, Edvensson and Malone distinguish between human capital and intellectual capital in the following way:

- **Human Capital:**
  - The combined knowledge, skill, innovativeness, and ability of the company's individual employees to meet the task at hand. It also includes the company's values, culture, and philosophy. Human capital cannot be owned by the company.

- **Structural Capital:**
  - The hardware, software, databases, organisational structure, patents, trademarks and everything else of organisational capability that supports those employees' productively: in a word, everything left at the office when the employees go home... Unlike human capital, structural capital can be owned and therefore traded.

- **Intellectual Capital:**
  - This is human capital plus structural capital. ²¹

The distinction made by Edvensson and Malone between human capital and intellectual capital is relevant to the methodology that Edvensson developed at Skania AFS for the measurement of intellectual capital. ²² Edvensson serves as...
Corporate Director of Intellectual Capital at Skania, where he undertook pioneering work in developing instruments to measure intellectual capital.

The growing interest in measuring both intellectual capital and human capital investment point to the significance of these concepts in a knowledge-based economy.

There is a role for the VET sector in its work in assisting enterprises to understand, value, develop, and use human and intellectual capital in their work. Encouraging and supporting lifelong learning in the workplace can be an important contribution towards this end.

Various strategies discussed in this report can contribute to this objective. These include:

- encouraging and supporting the development of networks of firms (for example industry clusters) as learning systems and knowledge generating networks
- fostering the development of learning communities in other ways, for example communities of practice
- assisting firms to develop as learning organisations, and providing exemplars through the development of VET institutions as learning organisations
- bringing human and intellectual capital concepts into business studies including measurement aspects

In addition to the work of VET institutions, there is an important role for government in an environment where ‘OECD societies are transforming in ways that make human attributes central to economic prosperity.’

It is in the interest of governments to improve this understanding. Their strategies for promoting learning across populations should draw on a new model of the relationships between human competence and economic success appropriate to the ‘knowledge economy.’

(OECD 1998a, p.91)

Whether such a new model of economic success in the knowledge economy, that goes beyond the dictates of economic rationalism, can be forged and applied is one of the key issues arising from this study.
Notes

2 Thurow 1996, p.68.
4 We have followed Davenport and Prusak in making these distinctions, op.cit., pp.2–6.
5 Marquardt & Kearsley 1998, p.156.
8 Ibid., p.9.
11 Team learning is one of the key disciplines of a learning organisation; this is discussed by Senge 1990, pp.233–272.
12 See, for example, the Newcastle and Albury-Wodonga case studies in Volume 2, with industry clusters used in Newcastle and industry focus groups in Albury-Wodonga.
14 Candy 1991.
15 Allee 1997.
16 See Part 2, chapters 6 and 7. There is discussion of the use of industry clusters in Newcastle in the Newcastle case study (Volume 2).
17 See chapter 11, for our discussion of this concept.
19 Ibid., p.99.
20 OECD 1998a.
21 Edvinsson & Malone 1997, p.11.
22 Ibid.
23 OECD has addressed the assessment of human capital investment. This has included the work in literacy discussed in chapter 11. See OECD 1998a.
14 Orienting VET institutions to the learning age

Our education institutions do not always keep up with the rhythm of change in the larger world. (OECD1996b)

The university, college, or learning centre of the next century will look very different to that of the last. (Secretary of State for Education and Employment 1998a)

VET institutions face the challenge of orienting their work to the growing imperatives for lifelong learning in a context of escalating change and uncertainty. While this is a daunting task, there are also major opportunities for VET institutions to exercise a creative leadership role in the transition to a learning society in Australia.

All the main themes of this report have implications for the work of VET institutions, as does each of the challenges discussed in Part 3 of the report. The cumulative impact of these themes and challenges in the work of institutions will be radical, so that the VET college of the next century will look very different to that of the last. Managing this transition will be a major challenge for institutions.

In the case of the TAFE sector, this will inaugurate a new phase of TAFE development in Australia with exciting opportunities to be in the vanguard of development towards the learning society.

Some dimensions of the challenge

Key dimensions of the challenge that VET institutions will face in orienting their work to lifelong learning in the Learning Age include the following.

References to the chapter of this report where the objective is discussed are given:

- Assisting their students to become motivated self-directed learners—chapter 5
- Developing the institution as a learning organisation—chapter 6
- Contributing to their community developing as a learning community/Learning City—chapter 7
- Actively promoting lifelong learning—chapter 9
- Forging strategic partnerships to pursue lifelong learning objectives—chapter 10
- Being proactive in contributing to equity objections in a learning society—chapter 11
Strategies and issues

The learning organisation strategy, as discussed in chapter 6, has particular value in providing a framework to enable institutions to address the spectrum of issues set out above. In developing as learning organisations, VET institutions will provide exemplars for their communities and for the enterprises in these communities, and will enhance their capability to transform themselves in line with changing conditions.

The learning organisation approach also links to the development of the local community as a learning community and to the forging of strategic partnerships necessary for this development. We observed these relationships in the Albury-Wodonga case study.¹

It is further necessary to view lifelong learning as a master concept for the organisation of the work of institutions. The implications of this notion flow over into curriculum, pedagogies adopted, professional development, and the overall organisation and operations of the institution.

Giving effect to lifelong learning objectives raises a broad spectrum of issues for institutions which are discussed in general terms in the chapters of this report. There are four aspects that require further comment, however, in relation to the work of VET institutions. These are:

- the pedagogical implications of lifelong learning for institutions
- the question of values in VET provision
- the issue of leadership
- transforming institutions

We comment on these aspects below.

A new pedagogy for VET?

The profile of the lifelong learner given in chapter 5 points to the need for VET institutions to adopt active learning strategies that encourage their students to develop self-reliance in learning, a love of learning, curiosity and imagination, and the mix of learning to learn skills required by the self-directed lifelong learner.

The extent to which VET institutions have adapted their pedagogies so as to
foster these attributes is not clear. Statistics gathered through the national AVETMISS collection show that traditional teacher-focussed classroom delivery remains the dominant mode of instruction, with the range of ‘flexible delivery’ strategies having a minor role.

However, these statistics may conceal the extent to which active learning methods are used within a teacher/classroom context. We are aware of a range of good practice examples in VET institutions across Australia, including the use of action learning strategies—although this is probably not the dominant approach in most institutions.

In order to facilitate discussion of the implications of lifelong learning for pedagogies in VET institutions, we have set out in exhibit 5 a set of guiding principles for a learning-focussed pedagogy for VET institutions, directed at assisting VET students to become lifelong learners. These principles should be read in conjunction with the profile of a lifelong learner given in chapter 5.

These principles are taken from work by Senta Raizen for the OECD reviewing the research base for education and work relationships. The principles were repeated by the OECD in its report ‘Lifelong learning for all’ arising from its 1996 Meeting of Education Ministers. The Raizen principles offer a useful basis for VET institutions reviewing their own learning strategies in the context of lifelong learning objectives. As suggested above, the principles should be considered in association with the profile of a lifelong learner given in this report.

**Recommendation 22**

a. That VET institutions review their learning strategies for students in the light of lifelong learning objectives and the principles for a learning-focussed pedagogy given in this report.

b. That the profile of a lifelong learner set out in this report should be taken into account in this review.

c. This review should lead to the progressive implementation and extension of learning strategies directed at assisting students to become motivated, self-directed lifelong learners.

The principles listed in exhibit 6 also point to the need for students to acquire cognitive, metacognitive, social, cultural and practical competencies. While the foundations for these competencies should be laid in schools, the VET sector has an important role in reinforcing and extending the work of schools, and in linking these competencies to the workplace and a range of social contexts. For some students a significant remedial/bridging role will be necessary.

The comments on learning strategies set out above reflect our view of the value of situated learning in the work of VET institutions in the transition to a Learning Society. ‘By embedding subject matter in the on-going experiences of learners, and by creating opportunities for learners to live subject matter in the context of real world challenges, knowledge is acquired and learning transfers from the classroom to the realm of practice.’
A further key advantage for VET derives from the fact that 'learning is essentially a matter of creating meaning from the real activities of daily living.' Embedding situated learning in the work of VET institutions will contribute much to producing students who have the capability to be lifelong learners in a wide variety of contexts.

Exhibit 6: Principles for a learning-focused pedagogy for VET

- Any learning experience must be meaningful and motivating for learners: they must be able to make sense of it and understand its purpose.

- Any learning experience must take into account what the learner brings to it; individuals come to any learning experience with prior knowledge and experience which may either facilitate or impede the intended learning.

- Learning experiences should interweave domain-knowledge, problem-solving strategies appropriate to the domain, and real-world applications of both: most people learn best when declarative knowledge (the 'what'), procedural knowledge (the 'how'), and strategic knowledge (the 'when'), are integrated.

- Learners must be actively involved in their own learning, even as they are provided with models of expert performance to emulate. They need coaching and error-correction, in diminishing amounts—a 'fade'—that will allow them to become autonomous and independent.

- Learning sequences should introduce increasing complexity, yet students should learn at any level of complexity to attend to the general nature of a task before attending to its details.

- Learning experiences should help each person to build strategies for controlling his or her own performance: setting goals, planning, checking work and monitoring progress, and revising their courses of learning. Most importantly, learners need to develop strategies for acquiring additional knowledge and expertise.

- Learning experiences should introduce the learner to the community of participants in a given domain or occupation, so that the individual will come to understand the physical, conceptual, symbolic and social tools of the community and their use.

Source: Raizen, S. 1994, 'Learning and work: The research base,' in OECD, Vocational education and training for youth, Paris

Values in learning

We have observed in chapter 8 the crucial significance of values in building a humane, inclusive Learning Society; in chapter 13 we comment on the key role of values in the generation of knowledge in a knowledge-based economy.

Becoming a lifelong learner involves an on-going process of surfacing and clarifying values as the learner creates meaning from the activities of daily living. Our comments on situated learning above reflect this orientation which should be embedded in the work of VET institutions.

This approach to education has been called values integrating education by the President of the Auckland Institute of Technology, Dr John Hinchcliff.

\[ I \text{have affirmed a values oriented context-dependent learner engaged with other learners in a dynamic and creative process. This integrating approach encourages the learner to build the ever developing synthesis, to see things in a multi-model way in a holistic system where everything relates to everything else, where } \]
This concept of values integrating education has much in common with the profile of the lifelong learner set out in chapter 5, in respect of such attributes as an inquiring mind and curiosity, helicopter vision which connects things, and possessing a repertoire of learning skills. It is now a necessary aspect of preparing VET students to be knowledge workers in a knowledge-based economy. Embedding such a philosophy in the work of VET institutions will contribute much to producing motivated lifelong learners who are active citizens of a Learning Society.

Exercising connective leadership

Destroyer of Walls: Builder of Bridges (Kanter 1995)

In our consultations, the need for VET institutions to exercise leadership in advancing lifelong learning was often pointed out. Terms such as ‘co-operative leadership’ were used to distinguish this from the authoritarian style of leadership relevant to other contexts and times.

The notion of co-operative leadership, which is vital in building strategic partnerships for lifelong learning, can be extended to the concept of connective leadership which is regarded by Jean Lipman-Blumen as the key requirement for leadership in the ‘connected’ New World. This is regarded as a new era for leadership requiring a new style and strategies in an interdependent world of exponential change. The concept of connective leadership has a good deal to offer VET institutions in re-orienting their work to the requirements of lifelong learning and the transition to a Learning Society, and in forging strategic partnerships.

Connective leadership is value added in its outcomes through fostering an ethos that encourages and supports partnership, commitment, and the intrinsic values that underpin lifelong learning. Through linking and connecting for strategic purposes, it builds partnerships and alliances that both create synergies and provide for the free flow of ideas and information. It therefore contributes to building a learning culture in an institution or community.

We see much merit in fostering this approach to leadership in VET institutions, in the context of lifelong learning objectives and the requirements of a knowledge economy.

Transforming institutions

A persistent theme in the international literature we reviewed, on lifelong learning and on the changes in work and society, was the stated need for educational institutions to transform themselves in order to be responsive to the conditions of the New World.

This notion is present, in the British government’s Green Paper on lifelong learning, as the issue of how the decisions and choices of individual learners and firms will require education and training institutions to transform themselves.5
In a similar view, the British Royal Society's report on Re-defining work urged a radical transformation of education institutions:

The education system remains rooted in the nineteenth century. It must be re-engineered, with two main aims: first to help young people develop the sophisticated range of competencies that they will need to prosper in the knowledge age; and second to integrate fully in the process of education the power of information and communication technology. This will transform the face of education, the relationships between teacher and learner, and the value placed on understanding rather than the simple acquisition of information.

(Bayliss 1998, p.8)

VET in Australia has already commenced this process of transformation, under the influence of such policies as user choice and training markets, flexible delivery, and innovative uses of modern technologies. In our consultations we encountered examples of good practice in each of these areas.

Nevertheless, the evidence available to us suggests that this process needs to be taken further if education is to lose the tag of 'the last of the cottage industries' and to be fully responsive to the conditions and challenges of the knowledge society of the 21st century.

The transformation of institutions in a learning society marked by exponential change is a journey without an end.

We have discussed the role of technology in this on-going process of transformation. The concept of flexible delivery has been a useful stimulus to action, but now retains an inappropriate supply-side flavour. While flexible learning is a more relevant concept in the conditions of the New World, the essential task is to make lifelong learning the master concept in the process of transforming institutions into the New World of the 21st century.

This will mean that VET institutions should become powerhouses of learning in learning communities. They will need to develop as learning organisations, so that they become exemplars of good practice in a learning society, and leaders in the development of their communities as learning communities. In this context the role of the teacher will be re-valued as a catalyst in forging the conditions of a learning society.

This process will obviously take time—but a number of the strategies discussed in this report afford opportunities for VET institutions to provide leadership in the transition to a learning society in Australia. These strategies include the learning organisation, learning community, strategic partnerships, and the innovative use of modern technologies.

Developing VET institutions as learning organisations, as discussed in chapter 6, will provide these institutions with the capability to transform themselves in line with changing conditions in an era of exponential change.

While lifelong learning poses a critical challenge for VET institutions, it also affords an opportunity to re-define and reassert the distinctive value and role of the work of VET institutions in Australian society in the emerging conditions of the New World of the 21st century.
Notes

1 See the Albury-Wodonga case study in Volume 2 of this report.
2 Raizen 1994.
3 OECD 1996a, p.110.
4 See ERIC Digest No.195, Situated learning in adult education, 1998.
5 Ibid., p.1.
6 Ibid., p.1.
7 Lipman-Blumen 1996.
Part 4: Towards the learning society

Part 4 of the report sets out the conclusions of this study and the implications for vocational education and training. It comments upon the need for a vision of VET in a learning society to guide policy and strategies towards lifelong learning objectives. Values and principles to underpin lifelong learning in a learning society are identified.
To flourish human societies need a vision of something better. (Thurow 1996)

Education: the necessary Utopia. (UNESCO 1996)

A central conclusion of this study is that the need exists to foster a shared vision of lifelong learning in Australia as a learning society, as a basis for coherent partnership action towards this objective.

While VET is one of many stakeholders in this process, the VET sector, in association with ACE, can nevertheless perform a useful leadership role for the reasons discussed in this report. The ‘frontier’ role of VET/ACE in association links to the formal education system, learning in enterprises, and learning in the community in a range of contexts. The VET/ACE partnership is therefore able to bridge and link these key contexts for learning in a learning society and to open up a diverse range of pathways.

The broader issues of possible national action to foster a shared vision of lifelong learning in Australia as a learning society go beyond the scope of this study. However, there are areas where VET and ACE can contribute greatly to a possible national discussion, by clarifying the values and principles that should be applied in the VET sector in order to progress lifelong learning objectives in the work of the sector.

While recognising this limitation in our perspective, we also wish to assert the centrality of recognising the interdependence of the domains of society that lifelong learning serves.

This recognition underpins the philosophy of the British government’s Green Paper on lifelong learning as ‘A Renaissance for a New Britain.’

Our vision of the Learning Age is about more than employment. The development of a culture of learning will help to build a united society, assist in the creation of personal independence and encourage our creativity and innovation.

(Secretary of State for Education and Employment 1998a, p.10)

An expanded vision for VET in a learning society

In our discussion paper we sought responses to some possible dimensions of an ‘expanded vision for VET in a learning society.’

We suggested that such a vision might provide for a creative synthesis of mutually supportive components which might incorporate:

- the current thrusts of VET reform
- a new humanism with a focus upon lifelong personal development and learning
the mainstreaming of equity objectives
 strengthened linkages to the other sectors of education

While the consultations suggested in-principle support for these objectives, a broad spectrum of barriers was pointed out. These included the dominance and effects of economic rationalism, the priority given to competition over cooperation, funding methods and priorities, the focus upon things that can be measured, and the lack of understanding of lifelong learning throughout the system.

These are substantial barriers, but they do not remove the need for a vision of the VET sector in a learning society which incorporates, enriches and transcends the instrumental vocational vision which has dominated over the past decade.

A central thesis of this report is that in a world of exponential change and ‘blur,’ it is no longer feasible or desirable to draw categoric boundaries which confine and limit aspiration and achievement. Rather, the Learning Age requires a revolution in aspiration and achievement.

This view challenges the dated perspective of the West Committee on higher education:

_The submissions that our Committee received supported the widespread view that VET should continue to teach competencies and maintain the strong focus on skills and higher education should cultivate attributes._


In a learning society, everyone will require the attributes of lifelong learners—and the VET sector should cultivate these attributes, along with schools, higher education and ACE. We set out our views on these attributes of lifelong learners in the profile in chapter 5. The compartmentalised view of the roles of the sectors of education reflected in the West Report is no longer relevant to the needs of a knowledge-based economy and a learning society. The position we have adopted underpins the British government’s Green Paper, which ‘acknowledges that learning for all will cut across and transcend artificial divisions of Government departments or education sectors’. It is critical that VET moves beyond ‘preparing students for a world that is disappearing.’

For this reason we reiterate the position set out in the discussion paper that the VET sector, in the context of globalisation, a knowledge-based economy, and a technology-driven learning society, will need an expanded vision to guide the development of its role in the Learning Age.

This vision should encompass the role of the sector in:

- meeting the skill needs of industry
- equipping Australians for a more complex and uncertain world of work and for active participation in society
- assisting Australians to maintain employability in a world of exponential change
- adding to personal fulfilment and quality of life
- fostering and supporting lifelong learning for all in the community
- contributing to building community and partnership to support economic, social, cultural and individual development objectives
- generally contributing to building a competitive, inclusive society
We have taken the position that these objectives in the conditions of the New World are complementary and mutually reinforcing, and that they can only be addressed successfully through many forms of strategic partnership at all levels.

Learning strategies discussed in this report, such as the Learning City approach, provide ways of developing the necessary partnerships (and shared vision) to build a learning society.

We have also concluded that unless the VET sector adopts comprehensive policies and strategies to re-define and reassert its role and value in the transition to a learning society, the sector will stagnate in the emerging conditions of the Learning Age.

The challenge of the Learning Age for VET is real and immediate. There is a critical need for a process to foster a shared vision of the role of the sector in the emerging conditions of the 21st century as a basis for concerted action in confronting the challenges discussed in this report.

**Values, principles for lifelong learning and VET**

An important aspect of the elements of a vision for VET in the Learning Age outlined above resides in the values that would underpin such a vision. This gives effect to our conclusion that the need exists to re-assert and redefine the place of values in the work of VET.

The various reasons that support this conclusion are set out in this report. They relate to such aspects as the characteristics of a lifelong learner, the socio-economic changes discussed in chapter 2, the nature of a learning society, and the generation and use of knowledge in a knowledge-based economy.

VET over the past decade has been dominated by the instrumental values of economic rationalisation. While efficiency and the values of market economics have a necessary place in an educational service, they are not sufficient in the emerging conditions of the New world discussed in this report.

If VET is to produce motivated, self-directed learners—able to learn and develop throughout the lifecycle, and to be active citizens in learning communities—the importance of 'stars to steer by' becomes fundamental. VET students must be assisted to engage with values, and to re-frame their perspectives in the light of learning and experience. An era of individual sovereignty and responsibility requires this core competence of a lifelong learner in a learning society.

What we have termed 'values integrating education' in chapter 14 should become a necessary aspect of the work of the VET sector. Recognising the importance of values in education and training for a learning society will add to the richness and quality of VET.

Our views on values for a learning society are set out in a number of chapters in this report. As a basis for further discussion, we have summarised in exhibit 6 our views on values and principles to support lifelong learning in a learning society. While these values and principles are not restricted to the role of the VET sector, much would be gained from extensive discussion of the values and principles required to underpin a learning society.
We point in this report to a number of tensions and roadblocks that arise from the conflict of the dominant economic rationalist values and the values that would support a learning society. Tensions between competing values will need to be addressed in progressing lifelong learning in Australia.

**Principles to underpin lifelong learning strategies**

The growing interest in lifelong learning has led to several attempts in recent years to identify principles and strategic goals to underpin strategies for lifelong learning.

These have included:

- the Lifelong Learning conclusions adopted by the Council of the European Union at its meeting on 20 December 1996, at the end of the 1996 Year of Lifelong Learning
- the six interrelated sets of strategic goals identified by the OECD in its report of its 1996 Meeting of Education Ministers on lifelong learning
- the principles underpinning the strategies of the British government’s 1998 Green Paper on lifelong learning
Exhibit 7: Some values and principles to underpin lifelong learning in a learning society

Values
- Humane democratic, community values underpin lifelong learning for all in a competitive, democratic, inclusive society.
- Love of learning, curiosity, creativity, and personal fulfilment are valued, together with personal responsibility for learning throughout life and the civic values of a responsible citizen in a community.
- Partnership and co-operation are valued.
- Learning to know, do, understanding others, and learning to be are all valued by education systems.

Principles
- Lifelong learning initiatives should strike an appropriate balance between personal, cultural, civic and social dimensions, and economic and employment concerns. In addition, they should also include democratic principles and human rights values.
- Each stage of education and training should contribute appropriately to the continuum of lifelong learning.
- Lifelong learning must be based on a wide range of learning opportunities, allowing all individuals to progress in their education according to their social, cultural and economic interests and needs.
- Everyone should be assisted to acquire, in addition to the core basic skills of literacy and numeracy, a broad base of knowledge, skills, attitudes and experiences that will encourage and support learning throughout life.
- Lifelong learning should aim to promote individual abilities, enhance employability, make the best use of available human resources and talent, as well as contributing to the promotion of gender equality, the elimination of social exclusion, and the promotion of active participation in a democratic society.
- Lifelong learning requires the development of flexible and innovative approaches to education and training, including family involvement, in order to promote a sense of inquiry, initiative and motivation of individuals in the learning process.
- Lifelong learning demands that individuals, as learners, take a greater sense of responsibility for their own education, training and personal development—and in this regard appropriate guidance or counselling should be available to adult learners.
- The continuum of lifelong learning should have as central objective at all stages the promotion of equality of opportunity.
- Collectively, individuals, institutions, enterprises, regional authorities, governments, employers and unions where appropriate, and society in general should—within their own areas of responsibility—create conditions for, and engender a positive attitude towards lifelong learning in all its aspects, and minimise obstacles to participation in education and training and other learning activities.

Source: Adapted from the ‘Lifelong Learning Conclusions’ adopted by the Council of the European Union at its meeting on 20 December 1996.

The conclusions adopted by the Council of the European Union are given in Annex 1 of our Overview of International Trends, Volume 2. These conclusions have a universal application, and are as relevant to strategies for lifelong learning in Australia as in the countries of the European Union. We have accordingly included these conclusions in exhibit 6, with some modifications, as general principles to guide strategies for lifelong learning in all sectors of education and training.

We have also taken account the six strategic goals identified by the OECD in the analysis and recommendations of this report.

In the case of the British government’s Green Paper, the British National Institution of Adult Continuing Education (NIACE), in its analysis of the Green Paper, identified six principles on which the Green Paper’s vision was built:
- investing in learning to benefit everyone
- lifting barriers to learning
- putting people first
- sharing responsibility with employers, employees, and the community
- achieving world class standards and value for money
- working together as a key to success

Our analysis supports the relevance of all these principles to the Australian situation, and we have taken them into account in our conclusions and recommendations.

**Lifelong learning as a master concept**

Progressing Australia as a learning society will require lifelong learning to be seen as a master concept, for the coherent development of all sectors of education and training. The necessary strategic partnerships are unlikely to develop to the extent needed unless there is a shared national vision of Australia as a learning society committed to extending lifelong learning opportunities for all.

Such a national vision has been enunciated by the British government and set out in its Green Paper on lifelong learning. There is a need for a similar national vision in Australia which includes a recognition of the essential role of lifelong learning as a master concept for all sectors of education and training.

The consequences of the absence of a shared national vision of lifelong learning were evident in the case studies we undertook, in the identified barriers that impeded collaborative action to extend learning opportunities and to maximise the contribution of education and training to economic and social development in communities. The introduction to the case studies in Volume 2 comments on these barriers.

There is, therefore, a compelling case for national action to foster a shared national vision of Australia as a learning society committed to extending learning opportunities for all. The recognition of lifelong learning as a master concept for all sectors of education and training will require action at a national level to ensure that the national goals for each of the sectors of education and training are compatible with this vision, and supportive of it. This will require action by the Ministerial Council on Education, Employment, Training and Youth Affairs.

In the course of this study we encountered a number of cross-sectoral issues that will need to be addressed in progressing Australia as a learning society. While this study was focussed upon the VET sector, schooling and the work of higher education are critically important in extending learning opportunities for the whole community.

The case studies illustrate the barriers to lifelong learning that derive from structural, ideological, funding and policy implements. There is comment on these issues in the Ballarat, Albury-Wodonga and Canberra case studies. The overview of international trends by Dr Papadopoulos shows, further, that these issues are not restricted to Australia, but are general barriers to collaborative action to extend lifelong learning opportunities common to many OECD countries.
There is a strong case to examine these issues at a national level, as a key aspect of national action to foster the development of Australia as a learning society. We are accordingly recommending this for consideration by MCEETYA.

Recommendation 1  
That MCEETYA give consideration to the implications of lifelong learning as a master concept for the development of all sectors of education and training—including the question of incorporating the concept into the review of the national goals for schooling, vocational education and training, and adult and community education, in order to ensure that a coherent framework of national goals exists that is compatible with, and supportive of, the essential requirements of advancing lifelong learning opportunities for all Australians.

Recommendation 2  
That, in exploring the implications of lifelong learning as a master concept for Australian education and training, MCEETYA consider undertaking or commissioning studies of the boundaries between VET and higher education on the one hand, and VET and secondary education on the other. Such studies should explore structural, ideological, funding and policy impediments to greater collaboration.

Opportunity and threat  
The transition to the Learning Age in the context discussed in this report presents a double-edged sword of opportunity and threat for the VET sector. We turn, in the final chapter of the report, to some of the main implications for the work of the sector that flow from the conclusions of this report.

Notes  
1 We discuss in chapter 13 the role of VET in responding to the needs of a knowledge-based economy.
2 Secretary of State for Employment and Education 1998.
4 We have adopted this term from a book by the President of the Auckland Institute of Technology, Dr John Hinchcliff. Hinchcliff 1997.
5 OECD 1996a, pp.95–96.
6 See appendix 4.
Conclusions and implications for VET

Conclusions

The principal conclusions of this study may be summarised as follows:

<table>
<thead>
<tr>
<th>Topic</th>
<th>Conclusion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lifelong learning for all</td>
<td>Changes in the socio-economic environment of VET make it imperative that the sector develop and implement coherent policies and strategies to further the objective of lifelong learning for all.</td>
</tr>
<tr>
<td>Broadening and enriching VET</td>
<td>This will require a broadening and deepening of VET provision to meet a mix of economic, social, and individual development objectives in ways that recognise the growing interdependence of these domains in the emerging conditions of the 21st century, and the need for learning in many contexts. Strategies that foster the convergence of general and vocational education will be needed.</td>
</tr>
<tr>
<td>A master concept for education and training</td>
<td>Lifelong learning should be seen as a master concept to guide the coherent development of all sectors of education and training in the conditions of the Learning Age.</td>
</tr>
<tr>
<td>Fostering lifelong learners</td>
<td>A key objective should be to assist VET students, and the partners of VET, to become motivated self-directed learners able to maintain learning throughout life.</td>
</tr>
<tr>
<td>Strategic partnerships</td>
<td>In the transition to a learning society, VET will need to develop many strategic partnerships at all levels, to encourage and support learning in a wide range of contexts. Barriers which impede partnership building will need to be addressed.</td>
</tr>
<tr>
<td>Learning communities/Learning City</td>
<td>In building strategic partnerships for lifelong learning, the value of strategies such as the learning communities/Learning City strategy should be recognised as ways of linking stakeholders for common action and diffusing learning widely through the community.</td>
</tr>
<tr>
<td>Responding to change</td>
<td>VET policy should have close regard to key changes in the socio-economic environment of VET, deriving from the impact of globalisation, new technologies, and the exponential pace of change. These include the emergence of a knowledge-based economy, the redefinition of work and careers, and the blurring of traditional social and economic boundaries, including those between industry sectors and jobs, vocational and non-vocational, general and vocational education, and work/non-work patterns and lifestyles. This area is in need of urgent review in the context of determining policy for lifelong learning and future strategic directions for VET.</td>
</tr>
</tbody>
</table>
**Knowledge-based economy** 8 A particular challenge for VET lies in responding to the requirements of a knowledge-based economy. This will require strengthening the links between learning, the generation of new knowledge, innovation, and commercial outcomes in a range of contexts including regional economic development and networks of firms. Preparing VET students to be knowledge workers will involve moving beyond skill and competence to incorporate other attributes needed in a knowledge-based economy marked by exponential change.

**ACE role** 9 VET and adult community education relationships, and the ambiguous status of ACE, should be clarified in the context of policy for lifelong learning, recognising that 'adult education and training is the most crucial and problematic area for the attainment of lifelong learning'. The key ACE role in equity strategies for lifelong learning, including the ACE role in the development and strengthening of pathways, bridges, and transitions for non-participants in lifelong learning, should be recognised in funding policies.

**Equity challenge** 10 VET should contribute actively to the critical equity challenge associated with lifelong learning, so that holistic strategies are put in place to address the 'learning divide' in society which threatens the notion of a democratically inclusive society. This will require a national co-operative approach to equity with partnership at all levels.

**Technology** 11 Technology is one of the keys to building a learning society. This will require strategies which link the power and potential of technology to well-articulated educational and community objectives and strategies for lifelong learning, and which address the 'learning divide' in society. There are indications across Australia of substantial innovation in this area, which could be taken further with strategic partnerships linked to lifelong learning objectives.

**Learning organisation** 12 The learning organisation approach should be actively promoted with priority given to: VET institutions developing as learning organisations; and networks of small firms developing as learning systems linked to innovation, knowledge generation, and regional and local economic development strategies.

**Tensions and bottlenecks** 13 This study identified a number of tensions and bottlenecks which will need to be addressed in progressing lifelong learning objectives. These include the bottlenecks identified by the OECD and in our Overview of International Trends; they also include tensions between values expressed in competition and co-operation, tensions between short-term survival and long-term strategic objectives and funding policies which provide insufficient incentives for innovation, partnership, and a long-term strategic vision towards lifelong learning for all.

**Building understanding and demand** 14 We found in our consultations across Australia that the significance of lifelong learning was not well understood, so that lifelong learning appeared marginal to the work of VET and is afforded little priority. This contrasts with the situation in the ACE sector, and in countries such as Britain and the Scandinavian countries. There is an urgent need for active promotion of lifelong learning, to foster public discussion and engender understanding and to build demand. Coordinated demand side policies are needed.
Implications for VET: The key issues

The conclusions summarised above involve a critical challenge for VET in adapting to the new socio-economic environment of its work, as discussed in this report, and the imperatives for lifelong learning for all which derive from this environment.

The nature and extent of the challenge means that an evolutionary approach will be required, building upon the achievements of training reform, and directed at the points where maximum leverage towards lifelong learning objectives can be obtained. The recommendations of this report have been framed with this objective in mind.

While the conclusions of this report relate, in the main, to the strategic long-term directions of change that will need to be addressed in adapting VET to the Learning Age, our recommendations offer an immediate action agenda that could be implemented to commence this process of adaptation and change.

This process of transition towards the role of VET in a technology-driven learning society, where learning is widely diffused throughout society, will need to be underpinned by a mindset shift from the current vocational training paradigm—that reflects past conditions and is being made obsolete by the extent and pace of change—to one underpinned by lifelong learning in a wide range of contexts.

In an era of ‘punctuated equilibrium’ there is a need for a philosophical and conceptual framework, relevant to the conditions of the new millennium, as a basis for redefining the role of the VET sector in a period of fundamental social and economic transformation.

VET in the world of blur: The learning age

In a connected world of rapid change and ‘blur’, and radical changes in work and society, it is no longer feasible or desirable to make categorical distinctions between economic and social, vocational and non-vocational, work and non-work, and sharply defined industry sectors and jobs. The speed of change in a connected global economy makes such distinctions obsolete and counterproductive. This has profound implications for the work of the VET sector.

Rather, VET must now prepare its students for an environment radically different to that in which the current VET arrangements evolved. Students can no longer be prepared for well defined lifelong jobs and careers, but must be prepared for uncertainty, exponential change, discontinuity, personal sovereignty and responsibility, and a lifetime of learning. This environment
requires personal attributes that must now be at the heart of the work of VET. These attributes are set out in our profile of lifelong learners given in chapter 5. Producing lifelong learners, able to be effective in work and in society, needs now to be seen as the central mission of the VET sector.

In this environment of unpredictable change, lifelong learning becomes a master concept or organising principle for education systems. However, nothing is fixed, and lifelong learning also needs to be seen as a multi-faceted, fluid, and open concept that will evolve with changing circumstances. For these reasons, we have taken the view that re-orienting VET to lifelong learning objectives will of necessity be evolutionary and incremental.

In order to give operational shape to this process of adjustment, we have identified six key challenges in Part 3 of this report that we see as the priority areas for early action. These challenges build on the key dimensions for lifelong learning identified in Part 1.

We therefore envisage this process of adjustment for VET as building on the current VET reforms and addressing the following key issues:

- promotion of understanding and demand for lifelong learning
- building strategic partnerships at all levels to advance lifelong learning objectives; this will include learning community/Learning City development as a strategy for this purpose
- re-orienting equity policy and strategies to an environment of lifelong learning so as to further the aspiration of lifelong learning opportunities for all
- using technology creatively to further lifelong learning and learning community objectives
- linking learning strategies with the generation and management of knowledge so that enterprises are supported in being enterprising, innovative and competitive in a knowledge-based economy
- re-orienting the work of VET institutions to lifelong learning objectives

Addressing these challenges will require an initial priority for complementary demand side policies.

In addition to the above challenges which are discussed in Part 3 of this report, there are three further important issues which require early attention in re-orienting VET to an environment of lifelong learning in the context of the New World.

These issues are:

- reviewing whether the current set of key competencies should be expanded to a broader set of generic competencies required by all citizens for effective participation in work and society in the New World
- reviewing the funding implications of lifelong learning
- the leadership role of government

**Generic competencies for lifelong learning**

The analysis of this report points to the conclusion that all citizens in a learning society require skills of research, enquiry, and expansion of the concepts and categories already held in a lifelong learning progression. While the existing set
of key competencies already endorsed and used in Australia is a useful foundation, there are issues as to whether all the key generic skills and competencies required by confident, self-directed lifelong learners are yet included in the Australian set of key competencies.

These issues focus, in particular, upon whether learning to learn should be regarded as a generic essential competency required by all in a learning society. Other generic competencies relating to attributes such as creativity and cultural understanding in a globalised, multicultural world require further consideration.

Learning to learn was included as one of the key foundation skills required by employers, in an extensive three year study undertaken in 1986-1989 by the American Society for Training and Development for the American Department of Labor. The director of this study, Anthony Carnevale, then carried over learning to learn as one of the sixteen jobs skills crucial for success in the New Economy.

In addition, the recent study on Re-defining Work, undertaken for the British Royal Society for the Encouragement of Arts, Manufactures and Commerce, came up with a broader set of 'New Competencies' required by the New World than is included in the current Australian set of key competencies. These competencies are set out in exhibit 7.

While there is some overlap between these New Competencies and the current Australian key competencies, the key distinction is that the RSA set relate to necessary life skills in the New World, and not only the part of life labelled 'work.' In the light of the blurring between work and non-work discussed in this report, there is a strong case to review whether the current set of key competencies require broadening.

Exhibit 8: The new generic competencies

- literacy, numeracy and IT capability to high levels
- understanding of ethics, values and how society, government and business work
- scientific method and the concept of proof
- how to learn new skills and knowledge
- how to evaluate and appreciate information
- how to take charge of your own learning
- how to deal well with other people, and to value them
- how to communicate effectively with others
- how to work in teams
- how to cope with change coming at you
- how to make things change
- how to manage risk and uncertainty
- how to be assertive enough to get your concerns addressed
- how to manage your own time and get results
- how to manage your life; including your financial affairs
- how to manage personal and emotional relationships
- how to make the best of your creative talents


In the light of the radical socio-economic-technological changes discussed in this report, these are important questions that require serious consideration. The
social changes discussed mean that it is increasingly unproductive to separate work-related generic competencies from 'life-skills' generic competencies required in an era of individual sovereignty and responsibility, and exponential change.

The broadening and strengthening of the generic competencies would be consistent with the approach that the European Union in taking in the development of a 'Europe of Knowledge' to overcome the rapid obsolescence of skills.7

_This means that it is necessary to promote on a lifelong basis creativity, flexibility, adaptability, the ability to 'learn to learn' and to solve problems. These are the conditions we must meet in order to overcome the now rapid obsolescence of skills._

(Commission of the European Communities 1995, p.3)

In view of the importance of this issue for both lifelong learning and the current approach to training reform, we recommend that ANTA examine this question in association with DEETYA and other stakeholders, with a view to advice being provided for MCEETYA.

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**Recommendation 9**

That ANTA, in association with DEETYA, review the question of whether the agreed national set of generic key competencies should be extended to include learning to learn and possibly other generic competencies needed in the Learning Age, as essential generic competencies required by all as the foundation for lifelong learning in a learning society.

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**Funding issues and incentives**

We found that funding issues frequently arose in the course of our consultations. It was often pointed out that current funding methods were linked to the traditional 'training paradigm,' and gave insufficient incentive for innovation in responding to student needs for lifelong learning, and for building strategic partnerships for this purpose. The effects of economic rationalism were frequently cited as barriers to progressing lifelong learning.

Incentives are clearly central to promoting lifelong learning. This has been recognised by the OECD,8 and by the British government in the policies built into its Green Paper on lifelong learning.9

The spectrum of issues involved in this question include incentives for individuals to invest in their own learning throughout life, for institutions to be responsive to the requirements of lifelong learning in a learning society, and for employers to be active partners in building a learning society.

The emerging policy responses include the scheme of individual learning accounts set out in the British Green Paper.10 The British Green Paper also includes a set of principles for public funding which defines the public responsibility in funding lifelong learning in the light of the definition of the roles and responsibilities of all stakeholders in a lifelong learning system.11
Comparable principles for public funding, which have regard to a similar definition of roles and responsibilities of stakeholders, are needed in Australia. While the issues go beyond the VET sector, and include principles for public funding of all sectors of education and training in a context of lifelong learning, it will be necessary for the VET sector (and ACE) to align funding policies with lifelong learning objectives.

We are therefore recommending that ANTA, in collaboration with other stakeholders, review its funding policies in the light of the lifelong learning needs and objectives identified in this report.

This review will be able to profit from work that the OECD is currently doing on the financing of lifelong learning, which should be available during 1999.

Recommendation 10
That ANTA, in collaboration with other stakeholders, review its funding policies for VET in the light of requirements to provide incentives for lifelong learning and generally to progress lifelong learning in Australia.

The leadership role of government

A central theme in the national seminar we conducted in November was the expressed view that government must provide national leadership in creating a learning society in Australia. Developing a shared vision of lifelong learning in Australia would require visionary leadership at a national level if this aspiration were to be achieved.

This view has been accepted and endorsed by the British government, with active leadership from the Secretary of State for Education and Employment and the Minister for Lifelong Learning.

This theme was urged in the Kennedy Report by recommending widening participation in further education—a—and endorsed in the Government’s response to the Kennedy Report.

The Government should provide leadership to place the creation of a self-perpetuating learning society at the heart of the national common purpose.

The Government recognises that it must give the lead in creating a learning society. It has set out its vision in the Learning Age. That places learning at the heart of our economic and social policies.

(Secretary of State for Education and Employment 1998b, p.7)

The situation recognised by the British government should apply equally in Australia, if Australia is to achieve the necessary condition of a learning society in the challenging and perilous context discussed in this report.

The critical leadership role of government extends to all levels of government: national, State/Territory, and local government. Leadership provided by the Wodonga Rural City Council in the planned development of Wodonga as a Learning City provides a pioneering Australian example of such leadership being exercised—and there are a range of examples from Britain where local government has taken a leadership role in Learning City development.
In order to build broad alliances to drive the development of Australia as a learning society able to master the conditions of the Learning Age, it is highly desirable that the leadership role of government should be linked to economic outcomes, so that active industry support and partnership is achieved. This notion is reflected in the terms of recommendation 3.

**Recommendation 3**
That all governments—National, State/Territory, and Local—note their critical role in promoting prosperity in an inclusive society through knowledge-based enterprises, and accordingly commit themselves to considering ways in which they can provide leadership in fostering lifelong learning and in developing the framework for a learning society.

**Opportunities for VET**

In addition to the issues discussed above, the transition to a learning society in Australia offers significant opportunities for VET to re-define and reassert its role in Australian society. Such a redefined role will, in our view, require active partnership development, and will include intimate partnership between VET and ACE in opening pathways for lifelong learning for all citizens.

We believe that the expansion of lifelong learning opportunities will open up new markets for VET. Some of these markets will be met by new forms of provision in contexts away from institutions, and using various forms of technology. Funding issues will need to be addressed. It will therefore be important for VET to remain in the vanguard of innovative uses of modern learning technologies, and for VET systems and institutions to collaborate to ensure that VET has the necessary expertise and resources to be central to these developments. As in Britain, with the development of the UfI, we consider it likely that new forms of public/private partnerships will evolve so that VET should be innovative in participating in such partnerships.

This vision of the future places a premium on innovation, responsiveness and leadership in VET. VET, in association with its alter ego ACE, is well placed to exercise a leadership role in progressing lifelong learning in Australia, in its 'frontier' role at the cross-roads between the formal education system, industry, and the community, with roots that reach into each of these sectors.

Addressing the intergenerational equity challenge of lifelong learning will require leadership from the VET/ACE sectors as the catalyst to address this major barrier to Australia as a learning society. We envisage VET/ACE alliances as the catalyst for much partnership development to progress lifelong learning objectives.

In a world of growing educational networking, it will also be necessary for VET institutions to be active in building networks and participating in them. Strategies discussed in this report, such as the Learning City, and industry clusters and networks, illustrate the opportunities in this new frontier of VET development. In addition to these local, State, and national networks, it will also be important for VET institutions to participate in international networks in order to remain open to new ideas, new markets, and changing conditions. In the world of the Internet, technology offers a way of participating in such
An evolutionary transition

An evolutionary transition to a learning society will be necessary. This means that change will be incremental, building upon the current situation and achievements, with priorities carefully chosen.

Our views on priorities for a phased transition are reflected in the five key dimensions for lifelong learning, and the six key challenges, identified in this report and in our recommendations.

This would mean, in the initial development phase, giving priority to:
- demand side measures to promote understanding and demand for lifelong learning, in particular among non-participating groups
- encouraging strategic partnership development through the funding of learning town/Learning City pilot projects, and other partnership strategies
- developing the research data base on participation and attitudes
- initiating reviews into funding issues associated with lifelong learning strategies, in the light of lifelong learning objectives and strategies

The VET sector, throughout its history, has a record of being responsive to changing conditions. Viewed from the perspective of history, lifelong learning presents the biggest challenge yet faced by VET.

Figure 10: Building a learning society—A national co-operative action agenda
A national co-operative action agenda

The recommendations of this report have been framed so as to offer a coherent national co-operative action agenda based upon partnerships associating all stakeholders. The recommendations relate to the principal themes of this report. These relationships are illustrated in appendix 6.

Figure 10 also illustrates the action framework we recommend, with action at four levels:
- Forging a national vision
- Guiding policy and development
- Building strategic partnerships
- Promoting understanding and demand between individuals, enterprises, institutions, communities

Concerted action across these levels will build upon the interdependencies between the contexts for learning discussed in this report in synergistic ways, so that outcomes are value added for all stakeholders in progressing Australia as a learning society.

Dissemination strategy

In the light of the growing importance of lifelong learning, and the limited knowledge and understanding that we found, there is a strong case for an effective dissemination strategy to follow up on this report in the diverse range of constituencies with a stake in this subject.

We therefore recommend the following actions by NCVER as a dissemination strategy:
- Publish the two volumes of this report, with high profile launches of the report in each State and Territory.
- Publish brief four page summaries targeted on employers and community bodies. These summaries could be included in newsletters and other publications of relevant bodies, such as Adult Learning Australia and the Australian Chamber of Commerce and Industry.
- Institute a Lifelong Learning monograph series, to provide relatively short and readable monographs on key subjects such as learning communities, learning organisations, and international trends and developments. The relevant chapters of this report could be adapted for this purpose.
- Establish a Lifelong Learning Information Service through a dedicated web-page.

A Lifelong Learning monograph series would have considerable value in building up the necessary knowledge and understanding of lifelong learning among key constituencies, including policy makers and the research community; the series would also help to foster an on-going dialogue to stimulate and underpin development towards lifelong learning in Australia.

The establishment of a Lifelong Learning Information Service through a dedicated web page would have considerable value by enabling employers, industry associations, policy makers, researchers, community bodies and other stakeholders to access information on lifelong learning.
Such a web page information service (LLIS) has been established by the city of Glasgow, as an important aspect of its development as a Learning City.

An option for action by NCVER would be for this service to be established by DETYA or ANTA.

Recommendation 19
a That the National Centre for Vocational Education Research institute a lifelong learning monograph series in order to foster an on-going dialogue among stakeholders on key issues relating to the role of vocational education and training in the transition to a learning society.

b That NCVER consider adapting the relevant chapters of this report for this purpose relating to learning organisations, learning communities, and international trends.

c That NCVER establish a Lifelong Learning Information Service through a dedicated web-page.

On the pathway towards a learning society

The central themes of this report relate to the interdependencies between the contexts and forms of learning, and the need for policies and strategies that achieve synergistic, value added relationships between learning in many contexts and forms. Strategic partnerships that build these relationships will open the pathways towards a learning society.

In the words of Tom Schuller and Anne Marie Boystn:

We need to acknowledge the interplay among all forms of learning, formal and informal, instrumental and expressive. (RSA 1996, p.18)

In doing this, we will broaden and deepen our vision of VET, and its place in Australian society.

But perhaps Baroness Kennedy should have the final word:

Our central purpose in lifelong learning must be to secure a socially cohesive and economically prosperous nation recognising that these aspirations are mutually reinforcing in that personal fulfilment, employability, and competitiveness are all part of the same piece. (NIACE 1998)
Notes

2  OECD 1996a, p. 93.
3  See chapter 1 for a discussion of this concept which derives from the work of the Ernst and Young Centre for Business Innovation in Boston.
4  Carnevale et al. 1990.
5  Carnevale 1991.
6  Bayliss1998.
7  Papadopoulos, op. cit., pp.9–11.
10  Ibid., pp.27–29.
13  See Papadopoulos, op. cit., pp.18–19.
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# Appendix 1

## Glossary

<table>
<thead>
<tr>
<th>Term</th>
<th>Definition</th>
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<tbody>
<tr>
<td>ACE</td>
<td>Adult and community education</td>
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<tr>
<td>Action learning</td>
<td>deliberate, conscious effort to review and reflect upon action of the individual, a team, or the organisation. This is often undertaken in teams or set</td>
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<td>ANTA</td>
<td>Australian National Training Authority</td>
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<tr>
<td>Cognitive map</td>
<td>the network of the meaning structures of the individual which constitute what an individual knows or understands</td>
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<tr>
<td>Data</td>
<td>a set of discrete, objective facts about events; data includes texts, facts, interpreted image and numeric codes that have not yet been interpreted</td>
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<td>DETYA</td>
<td>Department of Education, Training and Youth Affairs</td>
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<tr>
<td>Dialogue</td>
<td>involves free and creative exploration of complex and subtle issues, in which there is 'deep listening' to each other and suspending of one's own views</td>
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<tr>
<td>Double loop learning</td>
<td>a larger perspective that involves evaluation and modification of the goal or objective, as well as design of the path or procedures used to get there; in this mode, learning requires self conscious reflection</td>
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<tr>
<td>Generative learning</td>
<td>See Double loop learning</td>
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<tr>
<td>Human capital</td>
<td>the knowledge, skills, competencies and other attributes (including values) embodied in individuals that are relevant to economic activity</td>
</tr>
<tr>
<td>Information</td>
<td>data that is imbued with context and meaning</td>
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<tr>
<td>Intellectual capital</td>
<td>the product of human capital and structural capital (structural capital includes hardware, software, data bases, and other aspects of organisational capability that supports employees' productivity)</td>
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</table>
Knowledge

a fluid mix of framed experience, values, contextual information, and expert insight that provides a framework for evaluating and incorporating new experiences and information

Learning City

a Learning City unites all the diverse providers of learning to meet the needs and aspirations of all its citizens; through the range of resources they bring together, Learning Cities can provide local solutions to local challenges

Learning community

any group of people, whether linked by geography or by some other shared interest, that addresses the learning needs of its members through pro-active partnerships; it explicitly uses learning as a way of promoting social cohesion, regeneration and economic development

Learning society

a society in which everyone who wants is able to participate in education and training (formal and informal) throughout their lives; information about learning opportunities is widely available, provision is driven by demand rather than by supply, and learners (or potential learners) are enabled and empowered to pursue their individual preferences through financial arrangements and incentives at national, regional and local levels

Lifelong learner

an individual who has the motivation and capability to continue learning throughout the whole of life in a range of contexts (these contexts include work, formal education, and in the community)

Meta-cognition

an individual’s knowledge of his or her own cognitive processes

NCVER

National Centre for Vocational Education Research

Situated learning

knowledge and skills are learned in contexts that reflect how knowledge is obtained and applied in everyday situations; situated learning theory conceives of learning as a socio-cultural phenomenon rather than the action of an individual acquiring general information from a decontextualised body of knowledge

Social capital

aspects of social life—the existence of networks, norms and relationships—that enable people to act together, create synergies, and build partnerships

VET

vocational education and training
Appendix 2

Terms of reference of project

The project

The project is a consultative exploration of the context, strategies and policy implications of the application of the philosophy of lifelong education to the vocational education and training sector.

Project objectives

The purpose of the project is to assist policy makers and the community to understand and deal with the challenges facing the VET sector and associated areas of education in the transition to a Learning Society.

The study will involve the following objectives:

- to clarify the concept of lifelong learning in the current socio-economic context of VET, and to elucidate the implications for a range of stakeholders with an interest in VET
- to consult stakeholders on the identified needs and current situation, in order to establish what is being done in relation to these needs, and to identify strategies to progress lifelong learning

These objectives will have the following associated research questions:

- What changes, if any, are required in VET in response to the pressures for lifelong learning?
- What does a capability for lifelong learning involve, and what are the implications of this concept for the main stakeholders in the VET system?
- What is being done now to progress lifelong learning, and what gaps exist?
- What strategies are needed to progress a lifelong learning capability in the VET system?

These questions will have regard to 1) the foundations and pathways (including bridges and transitions) for lifelong learning, 2) the needs of special groups (including targeted disadvantaged groups, youth, adults, third age citizens, and overall equity objectives and strategies in VET), and 3) the role of new technologies and emerging markets for VET.
Appendix 3

Report on project seminar

The project seminar was held at the University of Technology Sydney on 25 November. There were 19 participants in the seminar, with all States and Territories represented excepting Tasmania and the Northern Territory.

The seminar discussed the draft findings and conclusions of the project set out in the project Interim Report, which was supplied to participants.

In order to focus the discussion further, four key challenges for VET were identified, with the seminar participants dividing into groups to discuss these subjects. The identified challenges were:

- promoting understanding and demand for lifelong learning
- building strategic partnerships
- treating people equitably
- using technology wisely

There is comment on the group reports below.

Response to the key themes and conclusions

In addition to the identified challenges, the seminar discussed a set of six key themes emerging from the project that were presented for reactions. While five of these themes were accepted without dissent, the sixth theme relating to the role of VET in a context of lifelong learning aroused considerable discussion.

This theme was originally stated as:

The implications of lifelong learning require a broadening of the role of VET beyond a focus on skill and competencies for employment.

This statement was challenged on the grounds that many VET institutions were already addressing such broader educational objectives, in particular in regional areas—although not all participants agreed that this was the case.

As a consequence of this discussion, this theme has been re-formulated in the following terms, so that it more clearly focussed on the role of VET institutions in fostering motivation and capability for lifelong learning:

The implications of lifelong learning require building on the achievements of training reform so that VET assists all students and partners to acquire motivation and capability for lifelong learning.

The revised set of Key Themes emerging from the discussions of the seminar is set out in exhibit 1.
Overall, the general findings and conclusions emerging from the project to date—as set out in the Interim Report—were accepted by the seminar participants. The main focus of the seminar became how the identified challenges could best be addressed. These are discussed below.

Promoting understanding and demand for lifelong learning

It was agreed that active promotion was required so that lifelong learning became more than a slogan. Government was seen as having a key leadership role so that a vision of Australia as a learning society was fostered. This would require a learning revolution in Australian society.

The government role would require whole-of-government strategies, so that necessary linkages could be achieved. The need for champions to promote lifelong learning was seen as a priority: a deficiency in the present situation was that there was no ‘Chief National Urger.’ This situation was contrasted with the position in Britain, where the Secretary of State for Education and Employment had taken a national leadership role, and where a Minister for Lifelong Learning had been created in the British government.

It was also considered that role models were needed at all levels, with teachers having an important function as role models. This suggested that VET institutions should be developed as learning organisations. The learning community/Learning City strategy was also seen as having value from a promotional point of view. Overall, the need existed to develop a critical mass of interaction involving all stakeholders, so that promotion became an integral component of the pathway towards a learning society.

A range of barriers were identified. These included rigid definitions of what constitutes useful learning. More flexibility is needed in such areas. It would also be necessary to get ‘runs on the board’ as an instrument to shift attitudes towards recognition of the need for lifelong learning.

Building strategic partnerships

This was recognised as a key requirement in progressing lifelong learning. While institutional and system barriers to partnership development were considered, cultural barriers were regarded as central. This suggested the need for comprehensive integrated strategies to bring about the necessary cultural change.

In considering partnership development, it was considered desirable to progress beyond the two-dimensional matrix used by the project team, to a three dimensional matrix. The current matrix involves a vertical dimension which associates the sectors of education and training in a more seamless system, and a horizontal dimension which links the range of societal contexts in which learning occurs.

Issues involved in achieving a partnership culture that progressed beyond vested interests were considered. It will be necessary to clarify funding aspects and who will drive such development.

The importance of a national system of information and guidance counselling was recognised. It was noted that a proposed development was being prepared
for MCEETYA, and that Adult Learning Australia had also given priority to this area in its proposals to the Australian government to foster lifelong learning.

**Treating people equitably**

The challenge of achieving equity in extending lifelong learning opportunities was recognised as central and complex. An intergenerational equity issue was recognised in addressing the past failures of the school system which left a significant proportion of the population with negative attitudes towards learning, and with little motivation towards participation in learning activities. It was felt that the past failures of the school system had to be accepted as a given in the situation.

The question of latent demand attracted considerable interest in respect of groups such as the most deprived of youth. This question was seen as relevant to the strategies to be adopted—concerning whether to adopt strategies that engage an existing latent demand, or to use strategies that more fundamentally build demand.

While resources for equity strategies were recognised as a problem, there was a view that much could be achieved through the re-allocation of existing resources so that priority went to those most in need. This argued for comprehensive system policies that went beyond an equity project approach, and had major implications for funding policies at both a system and institution level.

The need to measure the benefits and quantify the outcomes was regarded as central. While this was accepted as being complex and difficult, progress in this area was a necessary aspect of the transition to a learning society. Measurement of outcomes was regarded as a necessary instrument for achieving the attitudinal shifts required to foster an inclusive approach to equity in a learning society.

The case for interwoven, comprehensive strategies in which equity was an integral component was recognised. Strategies such as the Learning City/learning community approach provided a framework for development of this nature and were supported for this reason. A key objective was to empower local communities so that equity could be addressed as an integral component of a learning community development.

**Using technology wisely**

The centrality of technology to building a learning society was recognised, although it was also recognised that issues in this area were often more general issues which included a technology aspect. It was therefore important to view technology in the broader context of educational, economic, community, and societal development.

Three sets of issues were identified in the discussion, denoting dimensions which needed to be addressed. These were:

- issues impinging on learning
- issues impinging on systems
- issues relating to teachers, trainers, and mentors
In the case of learners, the critical issue was seen as addressing the balance between empowerment and exclusion that technology poses. This went to the question of the readiness and capability of individuals for lifelong learning in a technological driven environment. The link between technology and equity was recognised as vital.

In the case of systems, funding models were regarded as central. The current funding policies in VET had a training orientation in meeting the needs of industry, and did not encourage a broader and more creative use of technology for educational and community purposes.

There was also a bias towards investment in technology infrastructure by governments that gave less priority to content. There was no national strategy for content, and this was reflected in funding priorities.

The challenge of professional development for teachers and trainers in using technology wisely was regarded as a key. It was also considered that mentors could have a major role in achieving a wider use of modern learning technologies, and their training and development needs should also be recognised.

**Key themes**

- Imperative need for lifelong learning:
  - response to change
  - social cohesion and personal fulfilment
- Learning serves multiple goals:
  - economic, social, educational and cultural objectives
- Learning occurs in many contexts:
  - individual, families, organisations, communities are key contexts
- There are interdependencies between these learning contexts:
  - polices and strategies should build on these interdependencies
  - learning organisation and learning community strategies facilitate linkages
- There is a need for interwoven and connected multi-dimensional strategies.
- Building a learning society depends on strategic partnerships.
- Technology is a key to the future, if wisely used.
- The implications of lifelong learning require building upon the achievements of training reform, so that VET assists all students and partners to acquire motivation and capability for lifelong learning.
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<td><strong>Lifelong Learning Seminar</strong></td>
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<td><strong>Wednesday 25 November 1998, Room 517, Graduate School of Business</strong></td>
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<td>Wayne Collyer</td>
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<td>Director</td>
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<td>Central West College of TAFE</td>
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<td>Geraldton, WA</td>
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<td>Dr Alastair Crombie</td>
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<td>Research Centre for Vocational Education and Training</td>
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<td>Access &amp; Equity Unit</td>
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Appendix 3
| Therese O'Leary | A/Manager  
Intersectoral Relations & Special Initiatives  
SA Department of Education, Training & Employment |
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<tr>
<td>John Smith</td>
<td>Canberra Institute of Technology, ACT</td>
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</table>
| Sam Thomas     | Director  
NSW ACE Board &  
Chair MCEETYA Taskforce on ACT |
| Lesley Van Schuoubroeck | Director  
Access and Participation  
Western Australian Department of Training |
## Members of the project reference group

<table>
<thead>
<tr>
<th>Name</th>
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<tr>
<td>Hugh Guthrie (Chair)</td>
<td>Manager</td>
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<td>Co-ordination Branch</td>
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<td>National Centre for Vocational Education Research</td>
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<td>Anne Baly</td>
<td>Director</td>
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<td>Michael O'Sullivan</td>
<td>National Executive President</td>
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<td>Australian Services Union</td>
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<td>Sam Thomas</td>
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<td>NSW Adult &amp; Community Education Board</td>
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Overview of case studies

Summaries follow for the five case studies undertaken as a component of this study. The full case studies are set out in Volume 2 of this report.

The overviews that follow relate to the following studies: Albury-Wodonga, Ballarat, Devonport, Newcastle and Canberra.

Albury-Wodonga

The Albury-Wodonga case study illustrates 1) the barriers to collaborative partnership strategies for lifelong learning which arise from the sectoral divisions, organisation, and funding of post-secondary education under the Australian federal system, and 2) the role of leadership in a local community in taking action to build strategic partnerships to advance lifelong learning objectives. This was demonstrated when Wodonga declared itself Australia’s first Learning City in September 1998. At the same time, the Wodonga Institute of TAFE is taking action to develop as a learning organisation.

Albury-Wodonga is a region richly endowed with educational resource. However, these are divided between two State systems serving the twin cities with differing organisational arrangements and cultures. The resulting fragmentation has required action at the local level to develop collaboration based on a number of memoranda of understanding.

The local community has recognised unresolved issues relating to community ownership of VET provision to meet local needs, and in November 1997 the Mayors of the two City Councils signed a joint letter to the Premiers of Victoria and New South Wales urging a joint review to explore the benefits of consolidating the provision of VET through a single governance and structure that is ‘of the region and for the region.’ This matter is still unresolved. It illustrates the issues involved in the tensions between State systemic perspectives and local community aspirations.

An important resource in progress towards lifelong learning in Albury-Wodonga has been the role of the Continuing Education Centre (CEC) as the main ACE provider in the region. The Centre was established in 1974, and is the only community based provider with a mandate to serve both Albury and Wodonga. This means that CEC is required to relate to two State systems.

A further significant theme in the Albury-Wodonga study lies in the role of planned regional development. This development covers the period since 1974 when the Albury-Wodonga Development Corporation was established under co-operative arrangements involving the Commonwealth and the New South
Wales and Victorian Governments. While less has been achieved than was anticipated in the era of the Whitlam Government, social planning as well as economic development has been a priority, so that educational development has been seen as important and has been related to economic development.

The present economic development agency, Investment Albury-Wodonga, has established an education industry focus group to foster the role of education in economic development—and in 1997 the two City Councils issued a joint declaration on Post-Secondary Education as a Vital Industry. The progress of Wodonga's development as a Learning City is likely to offer valuable insights and lessons for other Australian communities in advancing lifelong learning.

**Ballarat**

Ballarat is a major provincial city of some 80,000 people, located a little over an hour from the State capital of Melbourne. As such, it has an unusual combination of big city amenities with small city lifestyle. It enjoys excellent cultural, sporting, educational, recreational and health facilities—but in some ways its strong sense of civic identity and its profound connection to its 'glorious past' militate against an openness to new ideas. In some ways, the Ballarat Case Study echoes certain themes that have been found elsewhere in Australia, while at the same time throwing up some distinctive features. Particularly striking are the following issues:

- **The separation of the educational 'haves' from the 'have nots,' and the quite different participation rates of the two groups.** Although it is something of an oversimplification, at times there seem to be two Ballarats: one well-educated, widely travelled and with plenty of disposable income, and the other under-educated, unemployed and battling to get by. Clearly, the learning needs, interests and capabilities of these two groups differ sharply; this poses a challenge to all educational providers, particularly those in the VET sector.

- **The impact of the current economic downturn on expenditure upon work-related training.** Unfortunately, in times of economic stringency, many employers—especially in Small and Medium Enterprises—reduce their expenditure upon training and development. This has the unfortunate effect of making their employees less flexible and their enterprises less competitive for the time when there is an upturn or change in circumstances.

- **The difficulties and challenges posed by attempts to identify pathways between TAFE and Higher Education.** As a dual-sector institution, the University of Ballarat employs a Pathways Project Officer, whose role is to negotiate discrete pathways for students wishing to move from the TAFE to the Higher Education Sector, or vice versa. Unfortunately, this has proven to be more difficult than originally expected, partly because of differences in course structures and funding arrangements, and partly because of ideological differences between TAFE and Higher Education. Considerably more work needs to be done before there is seamless articulation between various post-secondary providers.

- **The relative isolation of private VET providers from the debates and discourses within TAFE institutes—especially with respect to lifelong learning.** The profit motive, combined with the ideology of competitiveness, has tended to
Devonport

In many senses, Devonport is the quintessential small Australian city. Things are certainly tough, but there is resilience and an underlying optimism, which suggests that hard work, perseverance and political acumen will eventually lead to a return to better times. However, behind this positive facade, it is possible to detect a genuine concern that things have changed forever—and that the future lies in new technologies and industries, and in having a flexible, responsive and better-educated workforce. The problem for many people is how to disengage from the old ways of doing things, and to find the time to take on new skills.

At the broadest level, there would seem to be four particular challenges to be faced:

- **Overcoming the stigma associated with ‘learning.’** Unfortunately, Australian adults generally tend to deride ‘learning’ as something that is relevant only to young people, notably those in school. The idea that mature people, whether in the workforce or not, have a need for continuing...
learning, is anathema to many. This attitude will continue to bedevil any attempt to develop Australia as a ‘Learning Society.’

- **Viewing expenditure upon education and training as an investment rather than a cost.** Australian enterprises of all sizes have a generalised tendency to see the money they spend on staff development as a dispensable luxury, and one of the first things to go when times are tough. This leads to a mean-spiritedness when it comes to the development of employees, and to a short-sighted view that people will leave if they have been given learning opportunities. The view that excellent workplace learning might actually attract and retain good staff, or that it is part of a generalised social responsibility as corporate citizens, does not seem to feature in the world view of many Australian managers.

- **Reducing the excessive emphasis upon competition, and creating a genuine partnership between various providers.** Linked in some ways to the narrowly vocational understanding of workplace-based learning is a level of competitiveness between providers that, in the final analysis, militates against the best interests of everyone. Despite the potential for collaboration between and among the various providers, there seems to be a high degree of competition for students. This can largely be attributed to the prevailing ideologies of competition and pragmatism, which together actively militate against organisations sharing resources or working for the benefit of the community. The current emphasis on competitive neutrality and a ‘level playing field’ between providers has led to a compartmentalisation which is often not in the interests of the providers, seldom beneficial for individual learners, and never for the community as a whole. It must be addressed as a matter of urgency.

- **The potential for utilising the ‘Devonport Online Access Centre’ to develop greater familiarity with the Internet among local people, including employers.** There is no doubt that the promoters of Tasmanian Communities Online in general, and the managers of the Devonport Online Access Centre in particular, appreciate the enormous potential of electric connectivity to break down barriers, to develop new socially inclusive approaches, and to create new job opportunities. However, this understanding is not yet widespread in the community, with the potentially alienating effect of further dividing the ‘information rich’ from the ‘information poor’ in Devonport as elsewhere.

In many ways, the challenges confronted by Devonport are a microcosm of those confronted by Tasmania as a whole: lack of critical mass; loss of students and staff to other centres; seemingly intractable unemployment problems; an inability or unwillingness to cooperate with other providers; and a level of provincialism that borders on parochialism. To balance this, the city has many natural advantages, including a very desirable lifestyle, and excellent cultural, recreational and educational facilities. The challenge is to bring people together in a way that cuts across arbitrary boundaries and that serves the learning needs of the community in a holistic way. Only a concerted, community-wide program, which draws together all the stakeholders in developing local solutions to local problems, is likely to be successful in creating a learning-led recovery for the city.
Newcastle

Newcastle and the Hunter Valley have undergone significant changes over the past decades, with the economic dominance of large industrial enterprises declining for at least fifteen years. State, Federal and private money has been productively invested in assisting a change of industrial profile for the region. The employment base has become increasingly diversified, and although the region still produces 40% of Australia's aluminium and 80% of NSW electricity, 80% of the workforce are now employed in the service sector—particularly tourism, education, health and retail. The overall unemployment for the region in 1997 was 11%, but there are areas with a much higher rate, particularly of youth unemployment.

Electronic communication infrastructure is well established, with 16% of the over 19 year old population having home access to the Internet, compared to 8% nationally. 45% of all Hunter residents over 18 have access to a computer at home.

The strong educational infrastructure of schools, Hunter Institute of TAFE, community based and private providers, and the University of Newcastle, provides a strong foundation for the development of educational pathways and creative responses to the need for re-skilling as the industrial pattern in the region changes. Informal learning is fostered through the clusters of similar enterprises coming together to share experience and collaborate in the development of economic initiatives. Learning is also one of the products of the 'incubator' which support the fledgling crucial initial years of operation. The educational infrastructure—both formal and informal—is seen as an important drawcard for potential investors in the region, supporting the image of the Hunter as a region able to cope with constant change and re-learning.

A learning community?

No formal moves have been taken towards the idea of establishing Newcastle and the Hunter as a learning community, but the idea has been discussed informally in a number of forums. The mutual benefits of such an initiative for the community and commercial enterprises in the region would seem to be clear, and many of the networks and structures already in place could contribute to the development of a more holistic learning community approach.

Canberra

Canberra is a city in transition. These involve transitions:
- from an economy based on its role as national capital and seat of government, to a more diverse economy
- from a 'ward' of the Commonwealth, to self-government and self responsibility
- from an inward-looking city, to having a regional role in its region
- from a planned city, to a new mix of market driven and planning
- from a 'migrant city' to one more bonded in community roots

Each of these transitions will impact upon the progress of lifelong learning in Canberra. While Canberra is a city richly endowed with educational resources
and with a well educated and qualified population, a number of issues and tensions remain to be addressed in the pathway towards lifelong learning for all.

These issues include the dominance of competition over co-operation up to now—so that few strategic partnerships exist in the education sectors, and there is no standing mechanisms which links all the sectors.

As a small system with only limited discretionary funds to support innovation, Canberra is dependent on external sources of funding to support innovation in the VET sector. This remains a barrier to innovation. While the population is relatively homogeneous and affluent, groups that deviate from this norm are particularly disadvantaged, especially deprived youth.

Nevertheless, positive steps towards lifelong learning may be observed. These include developments in the school sector, where the Education Plan for 1998-2000 includes a commitment to lifelong learning as a priority with schools to develop as learning organisations.

A further key step occurred in adult and community education in 1995, when legislation was enacted to establish an ACT Advisory Council for this sector. A Strategic Plan for 1997-98 was then developed; this established priorities while a mapping exercise on participation is currently being completed.
# Appendix 6

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NCVER undertakes and manages research programs and monitors the performance of Australia's training system.

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