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Harnessing the New Demographic: Adult and Community Learning in Older Populations

An Australian Focus with General Implications

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1. THE NEW DEMOGRAPHY: A DRIVER FOR RE-FOCUSING ON ADULT AND COMMUNITY LEARNING?

This is a unique moment in human history- we have never lived longer (Borowski et al., 2007, p1). It has even been said that of all the people over 65 who have ever lived, two-thirds are alive today (M. K. Dychtwald, 1997).

We argue that adult and community learning provides untold opportunities across a range of parameters and locations to support optimal ageing – for societies, for organisations, for communities, families and individuals. We also argue that understanding the new demography and the impact of ageing societies in other areas such as public health, including opportunity and direct costs, will broaden and enhance the perspective of policy makers and practitioners involved in adult and community learning.

While the focus of this paper is largely on the Australian experience, the paper also points to some general issues relevant to other countries where international exchanges of experience through the PASCAL Network would have considerable value. The paper ends with a set of key questions which it is hoped will stimulate discussion.

An Ageing Society

The world faces two major changes in its population:

- a major explosion in population. The world's population doubled (3 to 6 billion) in the 40 years to 1999; is now 6.6 billion; and projected to be 9 billion by 2042 (US Census Bureau <http://www.census.gov/ipc/www/world.html>). Almost all (98%) of this increase will be in the developing world (Kinsella & Velkoff, 2001).
- an historic change in the age structure of populations. Almost all countries are ageing. What is less well known is that developing countries, especially those of regional interest to Australia, face the most rapid changes (Kinsella & Velkoff, 2001). Accelerated by its family planning policies, China is ageing faster than any other nation in history; and in Japan, the number of people retiring from the workforce has exceeded the number of new recruits since 1999 (International Labour Organization, 2007).

These unprecedented changes are driven by increased longevity (people are living longer because of reduced mortality) and decreased fertility (women are having fewer children); moderated by factors such as migration. Relevant highlights of the new demography, discussed in more detail in Appendix 1, include:

Globally:

- The world's population is projected to increase from 6.6 to 9 billion by 2042
- 98% of this increase will be in the developing world
- The world's population is also ageing, driven by declining fertility and longer life-spans
- Europe has already 'aged', driving a reassessment of pension and related policies
- Australia's regional partners will experience rapid population ageing (eg doubling in China, Hong Kong, India, Indonesia, Papua New Guinea by 2050)
- Europe got rich before it aged: the countries above will 'age' before they get rich

Australia:

- Australia occupies a transitional state between demographically young (eg Africa and Latin America) and old countries (eg Sweden, Italy and Greece)
- Australia's population is projected to both grow and age over the next 40 years
- 65+ year olds will double to 25% and 85 and overs triple to 5.6% of the total population (the latter showing the highest growth rate of all age groups)
- Australia's fertility rate at 1.8 is below replacement level, but higher than most developed countries
- Australia has the third highest longevity in the world (after Japan and France), largely because of declines in mortality, with men now living on average to 79 and women until 83
- Women predominate in older age, although the gender gap is narrowing
- Women have greater morbidity, are more likely to live alone, are more likely to be in residential care; yet still retire with half the resources of men

- Those under 15 years of age are projected to decrease from 20% to 13-16%, altering the availability of new labour market entrants and dependency ratios
- Ageing is a regional phenomenon in Australia, especially in some country towns
- Ethnic heterogeneity means Culturally and Linguistically Diverse (CALD) citizens over 65 will double in number from 2001 to 2016; with most currently of European origin, but those from Asia (Vietnam, China, Philippines, India, Malaysia and Sri Lanka) increasing
- The differential experiences of Indigenous Australians are shown in their classification as 'older' at 55 and over, and median age of 21 (cf 37 for the population as a whole); reflecting both high fertility rates and deaths at younger ages, largely from preventable diseases/ injuries.

Does Longer Life Mean Greater Morbidity and Dependency?

'Are we trading off longer life against quality of life?' is now a central question. Complex measures have been developed to assess this balance (eg Disability Adjusted Life Years (DALYs) (Murray & Lopez, 1996); Disability-Free Life Expectancy (DFLE); Healthy Life Expectancy (HALE) (Mathers, 2007, p 50). Improving, or at least maintaining, function as the population ages will be a priority for both individuals and society, as the OECD has pointed out. 'As the number and share of the population aged 65 and over grows steadily, improvements in their functional status could help mitigate the rise in demand for, and hence expenditure on, long-term care' (Lafortune et al., 2007, p.4).

A recent OECD review showed rather pessimistic outcomes, with only 5 of the 12 countries reviewed reporting a decline in disability among people aged 65 and over. Australia reported a stable rate. Dementia was the leading cause of years lost to disability in Australia in 1996, accounting for nearly 17% of disability burden; that burden being 70% higher for women than men (Mathers, 2007, p.53). The impact of dementia, including substantial savings if it can be prevented or delayed in onset, particularly given new evidence on brain plasticity, is a good example of the significance of learning across the life-course (as explored later in 'health and well-being').

Education in general plays an important role in reducing dependency across the life-course, not only by improving employment prospects (OECD, 2005a), but also through enhancing health and well-being. Those with a lower educational level have a greater risk of admission to institutional care, and at a somewhat earlier age (NIACE, 2003, p.1). Today's older Australians had fewer educational opportunities than younger cohorts (ABS, 2006a; AIHW, 2002); of concern because the earlier a person leaves school, the less likely he or she is subsequently to undertake any form of formal learning (NIACE, 2003, p.1).

We argue that such outcomes make informal and non-formal learning and pathways critically significant to older Australians and to people in other countries. Without such opportunities and encouragement, a Dutch forecast (NIACE, 2003, p.1) that, 'changes in educational level of a group occur only through the replacement of older, less educated cohorts by younger, better-educated cohorts, rather than as a result of adult education, migration or difference in life expectancy', may hold. It is also well established that people who are socio-economically advantaged have better health outcomes (Matthews et al., 2006).

Therefore participation in activities such as accessible and relevant adult and community learning should be a priority in optimising the functioning of all citizens given Australia's ageing population; an approach supported by agencies such as the World Health Organisation (WHO) and the Organisation for Economic Co-operation and Development (OECD), as well as by the Council of Australian Governments (COAG).

Policy Implications of the New Demography

Both the absolute numbers and the proportion of the total population who are 'older' are important for policy and service planning.

Globally, the demographic shifts outlined above present both challenges and opportunities for Australia. For example, in industrialised societies, both skill and labour supply shortages are predicted, heightening global competition, already evident in many sectors, including engineering/ construction, health, and information and communication technology (ICT). Yet if a global perspective is taken, labour supply is not declining. Instead, developing countries will have the advantage of an unprecedented share of the world's working-age population. Transfers (or 'poaching') of skilled workers from less advantaged countries may assist the economies of both the birth and host countries. Never-the-less it raises serious ethical issues, such as the impact of stripping developing

countries of their educated professionals, or the ability of nations to protect or assist their vulnerable members in a competitive global labour market place. In the overall framework of eliminating poverty, for example, even the World Bank advocates that the education of women (the mothers) is critical (Feachem, 1992; World Bank, 2006).

In OECD countries the impact of the new demography on pensions and workforce participation, as well as on care and support services, has attracted major policy attention, particularly in Europe (OECD, 2005b), but also in Australia (Australian Government, 2002, 2007; OECD, 2005a; Productivity Commission, 2005). Policy imperatives have included: reducing early exit from the workforce; encouraging older workers to maintain and obtain skills; and employers to retain, retrain and recruit older workers (OECD, 2005a, 2005b); promotion of all forms of learning, including life-long learning (Department of Education Science and Training (DEST), 2006; OECD, 2007a); and encouraging all citizens to maximise health and well-being across the life-course (Ilmarinen, 2005; WHO, 2002).

As the Australian policy reports indicate, 'Australia's demographic challenges affect economic growth and long-term fiscal sustainability' (Australian Government, 2007, p.1), as well as individual, family and community/ social structures and functioning. Australia is, however, recognised as being better placed to meet the demographic challenge than most other OECD countries (OECD, 2005a, 2005b), particularly as far as it's pension and health systems are concerned. Less attention and support have been given to the role of learning throughout life in active and healthy ageing, and in such areas as sustaining communities, reflecting the marginal condition of adult and community learning in Australia. This neglect needs to be challenged and corrected through strong, integrated, policy and practice.

This paper will use the WHO Framework on Active Ageing (World Health Organisation, 2002) to focus on the contribution of informal and non-formal learning to health and well being across the life-course, particularly through participation in life-long learning and sustaining communities.

WHO and OECD Policy Frameworks: Active Ageing (WHO) and Life-Long Learning (OECD)

In the WHO global policy framework 'Active Ageing' is defined as the process of optimising opportunities for health, participation and security in older age to enhance quality of life as people age. Active ageing allows people to realize their potential for physical, social, and mental well being throughout the life course and to participate in society according to their needs, desires and capacities, while providing them with adequate protection, security and care when they require assistance (World Health Organisation, 2002).

Participation is a crucial element of the concept of productive ageing, which focuses on the positive contributions made by older adults, not only in economic terms, but including all the socially valued roles performed by older people (Burr et al., 2002). One of the principal enablers facilitating continued participation across the life course is life-long learning.

The OECD has taken a significant interest in life-long learning for more than a decade. In 1996, the OECD Education Ministers agreed to develop strategies for 'life-long learning for all'; subsequently endorsed by Ministers of social affairs and the OECD Council at ministerial level (OECD, 2007a). Life-long learning, 'the concept of from cradle to grave', includes formal, non-formal and informal learning (defined in Appendix 2).

As the OECD reports, 'typically, learning that occurs outside formal education is not well understood, made visible or appropriately valued' (OECD, 2007a, p.1). 'The recognition of non-formal and informal learning is an important means for making the 'life-long learning for all' agenda a reality and, subsequently, for reshaping learning to better match the needs of the 21st century knowledge economies and open societies' (OECD, 2007a, p.1).

Even though the OECD claims the area is undervalued in general, Australia appears to be lagging considerably behind Europe, where cities, towns and regions are building their own communities as communities of learning. All EU member states subscribe to the premise that 'Lifelong learning is no longer just one aspect of education and training; it must become the guiding principle for provision and participation across the full continuum of learning contexts' (Kearns, 2005); because it has beneficial economic, social, political, cultural and environmental implications for everyone's quality of life (Longworth, 2006). All EU member countries are to have coherent and comprehensive life-long learning strategies by 2006 (Kearns, 2005, p.ii).

In addition to the more formal definitions provided in Appendix 2, Informal Learning has been graphically described by Livingstone as 'anything people do to gain knowledge, skill, or understanding'; and as 'the submerged part of

the iceberg of adult learning activities' (Livingstone, 2005). It can be related to: employment; community and volunteer-work; household work; or other general interests.

In the next section we apply the demographic imperative and the WHO/OECD emphasis on participation outlined above, to settings suggested by Livingstone to explore this overlooked and undervalued dimension of adult and community learning.

2. LEARNING: SUPPORTING OLDER CITIZENS IN KEY SETTINGS

Renewed recognition that significant learning is found in settings outside formal educational services validates the importance of examining aspects of non-formal and informal learning in work and workplaces, with an emphasis on the Finnish concept of 'Workability', in the Third Sector (including volunteering) and as a contribution to health and well-being, to promote an integrated, 'whole of society' view.

Work and Workplaces

The fundamental change in the balance between young and old has been a clarion call to focus on work and employment related policies and practices to address three converging trends:

- The workforce is ageing
- There are labour shortages in a growing number of sectors; as well as skill shortages and mismatches; and
- Many people may need to work beyond traditional retirement age

The myriad of changes in work and the labour market which OECD countries are facing include: the influence of new technologies; down-sizing, especially affecting older workers and middle-management; outsourcing, including off shore; the growth of casual and part-time work, including contract and portfolio-type work; the disappearance of traditional or life-time careers; the move from physically demanding work to more service oriented industries; changes in the roles and responsibilities of women, with increasing numbers of women in the workforce; and the blurring of work and leisure activities.

OECD countries have realised that without changing work and retirement patterns there will be one inactive person to every worker in Europe by 2050; and that GDP would also decline (OECD, 2005b). The OECD has stressed that, to preserve growth, it will be essential to unlock the tremendous potential value of older workers, particularly those planning early exit, those who are un- or under-employed or discouraged job seekers (OECD, 2005b). Alternative sources of workers would include: increasing the participation of women, especially prime age women, requiring resolution of issues such as child-care and elder-care; and the mobilisation of 'marginalised groups' such as people on disability support, migrants, and Indigenous groups. For example, the OECD's 2003 report, *Transforming Disability into Ability: Policies to Promote Work and Income Security for Disabled People*, noted that Australia had the lowest employment rate of people receiving disability benefits of all the countries studied; although the Australian Government's Welfare Reform agenda is designed to redress this.

To encourage timely action, the OECD reviewed 'ageing and employment policies' in 21 countries (OECD, 2005b) including Australia (OECD, 2005a, 2005b). Associated OECD Ministerial discussions (Brussels October 2005) concentrated on 3 key factors- supply, demand and employability- although they are clearly intertwined. A substantial outcome of the OECD and related work, as well as the coal-face urgency of labour and skill shortages, has been heightened emphasis on directly involving employers and the organisational level in any strategies.

In Australia, the Commonwealth Treasury has estimated that while the working population currently grows by 170 000 per year, it will be no more than 125 000 for the entire decade 2020-30 (Access Economics Ltd, 2001; Bishop, 1999). Significant government, industry and academic reports over the last ten years have highlighted the relatively low work-force participation rates of older Australians, particularly of older men, although the rate has begun to increase recently for men. Participation in general has been rising more steeply for women, although coming off a low base; and women still retire early, for a range of reasons (Australian Government, 2002, 2007; Bishop, 1999; Encel & Ranzijn, 2007; OECD, 2005a; Productivity Commission, 2005; Steinberg & Cain, 2004). Despite these efforts, long term unemployment (LTU) remains a particular problem for older workers, with the duration steadily increasing, with fluctuations, since the 1970s (Encel & Ranzijn, 2007, p. 147); a significant issue as the severity of LTU among 45-64 year olds means they are likely to leave the labour force entirely (Encel & Ranzijn, 2007).

One result of this policy attention, given even greater impetus by already extant labour and skill shortages has been renewed focus on the retention and retraining, as well as the re-entry, of older workers; raising the significance of continued learning and development. Targeted programs have been introduced, including in Australia by Commonwealth (eg 'Workforce Tomorrow' DEWR [Department of Employment and Workplace Relations], 2006; and the multi-strand 'Welfare-to-Work' program, including national advertising campaigns 'helping people move into work, DEWR, 2007) and State Governments (eg Queensland's 'Experience Pays' Program 2006-2009).

Thus learning across the life-course, learning to learn, and the workplace as a learning community, are important in maintaining interest, motivation, skills and knowledge among mature age workers, now targeted as a significant pool of labour and skill. This has become critical as the focus moves from a job for life, to employability for life, building on two sets of skills:

- Foundation skills of reading, writing, maths and learning to learn; and
- Newer basics of ICT skills, languages, technology- culture, entrepreneurship, and social skills (Kearns, 2005, p.37).

In Australia, the focus to date has been on training and skill development, primarily for younger workers, extending more recently to older workers (eg Mature-age apprenticeships). Attention needs to be paid to vocational education and training, the removal of disincentives and 'suitable' skill development programs (National Centre for Vocational Education Research, 2005). In this, the attitudes and behaviours of employers towards older workers are significant (Steinberg et al., 1996; Bowman & Kearns, forthcoming). While employers of larger organisations have been involved through age management strategies (eg Swinburne University's Business Work and Ageing [BWA]), it has proved difficult to engage with employers of small and medium enterprises (SMEs), which lack both resources and time (Steinberg, 2007). Encroaching skill and labour shortages are opening up new opportunities to engage with employers regarding skill development (and more recently just labour supply - 'anyone vertical with a heart-beat') (Steinberg, 2007).

An EU leader has defined good practice in the field of training older workers as: 'ensuring that older workers are not neglected in training and career development, that opportunities for learning are offered throughout working life, that training methods are appropriate to older workers, and that positive action is taken where necessary to compensate for discrimination in the past.' (Walker, 1997, p4).

The OECD Australian country report (OECD, 2005a, p.119), stated that older workers may be reluctant to engage in education and training because existing training programs are not well adapted to their needs. Five factors of particular importance in training older workers successfully were:

- Create a safe and non-threatening learning environment
- Negotiate a process of learning that engages the learner
- Encourage learners through feedback
- Adapt learning methods to needs and abilities and
- Use small and specialised classes

The Council of Australian Government's (COAG) Communique (2006) also noted the demographic, technological and competitive factors impacting on the workforce and focused on the need to increase the proportion of adults with the skills and qualifications needed to enjoy active and productive lives; exploring the potential of Adult and Community Education (ACE) to assist in achieving this end. However, even though ACE has been operating in Australia for over 100 years (Rimmer, 2007), it is widely recognised that the current focus is on skill development and training.

This focus needs to be broadened to incorporate learning across the broad spectrum of life. Organisations such as the International Labour Organisation (ILO) maintain that life-long learning is now a survival issue (International Labour Organization, 2005). The Commission of the European Union has emphasised that lifelong learning is no longer just one aspect of education and training and that it must become the guiding principle for provision and

participation across the full continuum of learning contexts (Kearns, 2005). It has beneficial economic, social, political, cultural and environmental implications for everyone's quality of life (Longworth, 2006). The Finnish national approach, including a focus on 'workability' is one approach worth examining.

The Finnish National Approach and Workability

Attention to the organisational and employer level in a broad spectrum approach is central to the multi-faceted Finnish National Program for Ageing Workers, regarded as leading the world (Ilmarinen, 2005). It was established in 1998 around the concepts of workability and employability, to address age management, including: early retirement; low rates of participation and re-employment among mature-age workers; and reduced working capacity. It targets employed and unemployed 45-64 year olds and is implemented through a group of social partners: five government departments; the Association of Local and Regional Authorities (showing the importance of the local government level); the Institute of Occupational Health (a broader interpretation than Australia's); the Social Insurance Institute; and representatives of pension funds; trade unions; and employers - a superb example of the need for ownership and co-operation by all of the key stake-holders. Its conceptual framework forms a matrix, addressing: the problems or possibilities; the solutions or means; and the results aimed for, at each of three key levels: at individual, enterprise, and societal, levels. Ilmarinen constantly stresses that the enterprise or organisational level is the most important place to start.

The concept of 'Workability' lies at the heart of the Finnish approach. It integrates the factors relating to both the individual and the work, which are important for a person's ability to perform in working life. Ilmarinen and his colleagues describe it as a house with four floors. The first three, health and functional capacities, education and competence, and values, attitudes and motivations, are classed as human resources and held to be largely the responsibility of the employee. The fourth layer of work as a whole includes both the dimensions of work and of the work environment, as well as management and work demands. This is seen to be largely the responsibility of the supervisor and employer.

Workability is measured by the Work Ability Index (WAI) and indicates opportunities for intervention; including for the whole gamut of learning. Workability and the WAI are currently being trialled in Australia with companies such as Qantas in a current Australian Research Council (ARC) Linkage Grant, *Redesigning Work for an Ageing Society* (Taylor, Ilmarinen, Steinberg et al, 2006-09).

The 'Workability' approach improves both productivity and well-being. Cost-benefit analyses show at least a 3-fold investment return to companies; in the best cases, 20-fold. For example, older worker's regulating their own work, particularly self regulating: breaks at work, order of work tasks, working methods and working speed, have produced highly significant improvements in both productivity and well-being in Finland and some 20 other countries (Ilmarinen, 2005). The Finnish studies also show that learning communities are significant contributors, not only to the retention and re-entry of older workers as work-force participants, but also to their successful transition to retirement; and to remaining involved citizens outside the paid work-force.

People's attitudes, worries, behaviours, ambitions, and needs around retirement, are now much studied. For example, a recent US study on the emotional aspects of retirement showed 5 stages; with an extraordinary time-span. Although not the most numerous group, 'Empowered Reinventors' were most proactive about retirement planning; most apt to view retirement as a time of new adventure and empowerment; considering meaningful or satisfying work very important to them. The unforeseen loss in retirement was social connections at work (K. Dychtwald, 2006); a loss that could be remedied by continued contribution and learning within the third sector or volunteering and engagement in informal and nonformal learning opportunities.

The Third Sector, Unpaid Work and Volunteering

At long last unpaid work is receiving the recognition it deserves. Unpaid work still constitutes around half of the work performed today (Livingstone, 2005, p.6); and is undertaken largely in households; and by volunteers in the community. It is of enormous value, with Australian men and women 65 and over contributing almost \$39 B per year in unpaid caring and voluntary work (de Vaus et al., 2003). It is primarily supported by the non-government or third sector (government and private sectors being the other two).

Most third sector organisations are small; operating on a purely voluntary basis, with fewer than 100 members. Some, however, are larger enterprises, making a significant contribution to the Australian workforce and to the economy. In June 1996, over 34 thousand such organisations employed 7.6% of the Australian workforce; and contributed 3.3% to Australia's GDP (Lyons, 2001). Population ageing has considerable significance for third sector workforces (Steinberg & Cain, 2004). Demand for both formal and informal services, many of which are provided by the third sector, will increase. Concurrently, higher levels of 'professionalism' and training are being required of both paid and volunteer staff to meet service and accountability requirements. Adding further complexity, competition from other sectors offering more competitive salaries and conditions may strip out both paid and volunteer staff. Increased opportunities for learning will be vital in 'holding the line' and providing quality service.

In 2006 there were almost 5.4 M adult volunteers, 35 % of the civilian population; contributing 760 M hours to their fellow Australians, an increase from 2000 due mainly to population increase, as the number of hours worked annually per person dropped (to 56 hrs from 72 hrs in 2000) for both men and women (ABS, 2006b). Volunteers perform a range of different tasks, the activities most frequently reported being fundraising (48% of their involvements), preparing and serving food (31%), teaching/ providing information (28%), administration (26%) and management (23%) (ABS, 2006b); with some gender differentials.

There may be considerable learning opportunities here for older Australians, as the largest group currently volunteering are those of prime age with families, Australians with higher levels of education and those who are, or have been, employed (ABS, 2006b). Motivating older Australians with lower educational levels and/or 'poorer' work histories to volunteer might both increase the volunteer workforce and provide opportunities for participation and learning among Australians who may become more isolated in a knowledge society. The relevance of the value of engagement and partnerships for a civil society is espoused by Reghenzani (2002) and draws upon the OECD policy principles for creating learning cities and regions. Developing learning communities generating self-reliance, collaboration, sustenance and connectivity is the intentional imperative.

However, volunteer work is the 'most discretionary type of work in advanced capitalist societies, and many people simply choose to opt out' (Livingstone, 2005, p.11). This is supported in Australia by ABS data showing reduced volunteer hours contributed per person (ABS, 2006b), as well as the difficulty being experienced by community organisations in recruiting and engaging Board and Management Committee members, including those with legal, accountancy, and program management skills. Effectiveness also requires knowledge across a broad spectrum of contemporary and future issues - again highlighting the importance of, as well as opportunities to engage in, lifelong learning.

Older people are a natural resource for organisations; able to give expertise, wisdom and life experience; and time. In turn, older people's organisations are also learning communities, offering a range of opportunities, such as University of the Third Age (U3A), networking (eg NEAT [Network for Education, Ageing and Technology], Institute for Rural Futures, University of New England), or peer education programs in the quality use of medicines and falls prevention (Council on the Ageing – Queensland [COTA-Q], 2007). COTA, U3A On-line, and networks such as NEAT provide new learning communities for older people via newer technologies. At one extreme, many older people, usually the better off, have embraced technology such as web cams. At the other, many on limited incomes can't afford computers; and may not access services such as libraries, despite the efforts of local authorities to encourage such learning options.

The increasing provision of information, resources, services and support on-line by governments and business further increases the risk of isolation for people without the necessary ICT access, interest or skills, reducing their options for participation; and making it imperative to encourage learning through compatible approaches and facilities. One such approach of almost universal interest is through health and well-being.

Health and Well-Being

In the contemporary ageing environment, there is growing interest in how older people can age well. New positive approaches to ageing research are identifying opportunities for maintaining capacities and well-being over the life course (Kendig, 2004). Key concepts in the healthy ageing discourse are successful ageing, active ageing, positive ageing and productive ageing (Peel et al., 2004). Productive ageing refers to engagement in productive activities in later life. A theoretical model proposed by Rowe and Kahn (Rowe & Kahn, 1997) shows that productive ageing is an integral part of successful ageing. In this model, successful ageing is conceptualised as the avoidance of disease and disability, the maintenance of high physical and cognitive function and sustained engagement in social and productive activities (Rowe & Kahn, 1997).

In the past, only paid activities were considered productive, a view that ignored the many activities undertaken in the course of daily life that improve human welfare but occur in the informal or unpaid setting. Recent research has defined a more comprehensive list of activities regarded as 'productive'. These include market-based economic activities (paid work), non-market activities with economic value, such as formal social and civic contributions (volunteering, informal helping behaviour or social assistance), self-improvement (education, training) and self-care (Baker et al., 2005).

The relationship of productive ageing and healthy ageing has been tested empirically in a number of studies, including the MacArthur Foundation Research Network on Successful Aging (Berkman et al., 1993) and the Americans' Changing Lives Study (Thoits & Hewitt, 2001). Findings from studies consistently demonstrate a strong relationship between productive activity, particularly volunteering, and health outcomes (Warburton, 2006). These include lower rates of mortality (Glass et al., 1999; Oman et al., 1999; Shmotkin et al., 2003); higher self reported health (Lum & Lightfoot, 2005; Van Willigen, 2000); improved life satisfaction (Aquino et al., 1996; Thoits & Hewitt, 2001; Van Willigen, 2000) and happiness (Baker et al., 2005). A particular dimension of this literature relates to psychological health. Thus, productive engagement is associated with positive psychological health (Greenfield & Marks, 2004; Musick & Wilson, 2003), including declines in somatic and mood symptoms (Fonda & Herzog, 2001), lower depressive symptoms (Lum & Lightfoot, 2005; Thoits & Hewitt, 2001); reduced anxiety and improved ability to deal with psychological distress (Rietschlin, 1998). As well as psychological health, productive activity is also associated with higher physical and mental functioning (Berkman et al., 1993; Glass et al., 1995).

As a dimension of productive engagement, training and educational development also have important implications for healthy ageing, particularly cognitive ageing. A wide range of animal and human studies suggest that lifelong learning, mental and physical exercise, and continuing social engagement are important factors in promoting cognitive vitality in ageing (Fillit et al., 2002; Studenski et al., 2006). The health benefits of life-long learning and learning communities can be well illustrated in relation to dementia, which accounts for 23 per cent or nearly a quarter of the total non-fatal burden of disease for older Australians (Begg et al, 2007).

There is starting to be good evidence that activity (physical, mental and social) is the best intervention (at this stage) to ward off cognitive decline. A meta-analysis of 29,000 people over a median of 7.1 years follow-up showed that elderly people with higher brain reserve (those with a rich history of diverse and complex mental activity) are 46% less likely to develop dementia, independent of other predictors (Valenzuela & Sachdev, 2006). Recent advances in the neurosciences suggest that impaired brains may be able to respond to the demands of activity, experience and environmental factors (Burke et al., 2007). These findings suggest new directions in the treatment and prevention of cognitive impairment and dementia through interventions that promote mental health, lifelong education, functional intimate relationships and social engagement, as well as appropriate nutrition and exercise (Burke et al., 2007). Such results represent huge potential benefits for improving quality of life for individuals, carers and communities. Further explication follows in the section on 'Achieving the Wider Benefits of Learning', with new concepts and implications of human, social and identity capital.

Any delay in the onset of dementia additionally has the potential to provide massive savings to Australia. Dementia already costs \$6.6 B - nearly 1% of GDP; and by mid-century may exceed 3% of GDP (Access Economics Ltd, 2003). Costs such as these mount a powerful argument for promoting the value of life-long learning and learning communities as an intervention for healthy and active ageing. In this, learning communities play a key role, as addressed in the next section.

Informal and Nonformal Learning

Participation in the types of intentional informal learning just discussed is greater than participation in formal education; reported at about 12 hours per week for Canadians over 65 (Livingstone, 2005). In Australia, we ask, 'what is being done for the two thirds of the population not engaged in formal credentialed learning'?

The OECD, in recognising informal and nonformal learning as part of the main follow up activities to their project on how qualifications systems can be a tool for promoting lifelong learning, has defined these educational instances (OECD, 2007a):

Informal: *refers to learning resulting from daily work-related, family or leisure activities;*
Nonformal: *refers to learning through a programme but it is not usually evaluated and does not lead to certification.*

This recent OECD review - *Recognition of Non-formal and Informal Learning* being undertaken in 27 countries, including Australia, provides a rare opportunity to re-integrate this important sector into Australian policy and

practice. Australian activity to date has included: a country paper (Department of Education Science and Training [DEST], 2006), thematic review and summary report (forthcoming). The stated purpose of the Review is to 'provide policy-makers with useful options for generating effective, beneficial and equitable systems of recognising non-formal and informal learning by: taking stock of existing institutional and technical arrangements; developing indicators to measure the benefits and risks and collect evidence of *who* benefits and *who* is at risk; collecting evidence of what is and is not working with current systems; and exploring effective, beneficial and equitable models based on the review of existing models'; with 'a focus in the non-formal and informal learning settings' (OECD, 2007a, p. 3).

Tied in to another thematic review, *Promoting Adult Learning* (OECD, 2005c), integrating lifelong learning policies is foreseen as a way of making issues of access and participation a reality for all. This includes the ageing demographic. Older age groups were identified at a disadvantage in being subjected to under-investment and access to participation in learning opportunities. As illustrated in the previous sections, it is not just for employability or continuing career training that the value of lifelong learning opportunities need to persist, but to enable the *improved health, wellbeing, civic participation and social cohesion* desired for society overall. This continues throughout the lifespan for a democratic and productive society.

Informal and nonformal learning has long been considered the domain of adult, community and continuing education. While many providers have veered onto the formal path to run accredited programs and thus achieve government funding (beyond dependency on fee for service, delivery of in-service, provision of integrated work-based learning, or sheer altruism), there is a significant function for lifelong methods and approaches - encountered through informal and nonformal means - that achieve benefits to self, community and society.

3. THE STRATEGIC ROLE OF ADULT AND COMMUNITY LEARNING: THE AUSTRALIAN EXPERIENCE

The *National Strategy for an Ageing Australia* (Minister for Ageing, 2002) includes only a passing reference to the role of education and lifelong learning in a proactive national strategy for ageing, while stating that these are important factors that can contribute to economic and social well being.

The Strategy acknowledged that there will be a need for a greater exploration of lifelong learning to enhance workplace skill, and recognized that the reduction of the youth population will mean the *easing of upwards growth pressure on school and tertiary training institutions* (Minister for Ageing, 2002, p.31). This may create opportunities to free some resources towards adult learning without an overall increase on resources for educative purposes. However, exclusively emphasizing the value of workforce productivity does not necessarily enhance our more holistic definition of productive lives through ongoing learning.

There is little evidence to date of this happening, apart from some funding development to strengthen the mature aged workforce. The wider benefits of learning for active ageing across a range of sectors and objectives have not yet been brought in to a comprehensive proactive national strategy for an ageing Australia. In fact, Standing Committee investigations pertinent to lifelong adult and community learning have been summarised by Rimmer (2007) as:

- *talk of a learning society and a clever country appear to be empty words that fail to address the needs of future generations* (p.320);
- *the value of lifelong learning in its various forms is neglected by government and fails the growing market and the need for adequate provision* (p.321).

Even the Council on the Ageing (COTA) Australia response to the *National Strategy* (COTA, 2000) remains focussed on mature age workforce implications. Although in *Strategy Three: Education, training and lifelong learning* developing a *culture of lifelong learning throughout the community backed up by a very wide range of accessible educational facilities to cater for diverse needs* is advised, utilitarian training needs only are explored.

One can extrapolate that upgrading skills in information technology has broader implications as community training is seen as overcoming barriers to involvement, but this is not made explicit, merely hinting at potential in stating current projects *counter a prevailing myth that people's capacity to learn diminishes with age*. The opportunity to realise the potential of *Strategy Five: Adequate safety net provisions*, fails to develop any concept of productive, active, fulfilling, optimal and purposeful living for those 'disadvantaged' in later life because they are not in 'paid employment'.

This situation reflects the ambiguous 'Cinderella' status of lifelong learning in Australia with the absence of a comprehensive national policy to foster learning throughout life for all Australians (Kearns, 2005), so that sectional divisions remain sharp and the wider benefits of learning for communities and their citizens, and Australian society overall, are not achieved to the extent possible.

In this situation, funding for non-vocational adult and community education has declined in recent years in a context where a major literacy and basic skills problem exists in the adult population that will impede objectives for Australia's social and economic development in coming decades.

However, while the strategic role of adult and community learning for active ageing policies and strategies has not yet been put in place, there are a number of signs of useful developments towards such an objective that hold promise of progress towards a more strategic role for adult and community learning throughout life and active/productive ageing.

These developments include:

- a growing role for local government councils in grassroots strategies;
- action being taken by some states to develop educational and community learning strategies to support active ageing; and
- policies to enhance the employability of older workers in jobs.

In this context, this paper comments on what further action is necessary to achieve a strategic role for adult and community learning in active ageing policies at all levels. We propose giving priority to three foundations of a strategic role for adult and community learning in active ageing to meet key social, cultural and economic objectives, explored further in the following sections on "Strengthening the Learning Contribution to Active Ageing: Key Policy Levers" and "Implications for Other Countries".

Succinctly, the proposed foundations are:

1. develop local community strategies for active ageing supported by lifelong learning policies, and building on the lessons of existing global best practice initiatives;
2. a lifecycle approach to learning throughout life which recognizes changing needs and preferences for learning in successive phases of life, and which provides support at key transition points in the lifecycle;
3. joined-up policies and strategies at all levels that enable the wider benefits of learning to be achieved in sectors such as personal development, health, welfare, sustaining communities, and in overall quality of life.

While Larsson (1999) in his *Active Ageing...* summation at the European Commission Brussels conference forecasted the relationships and pivotal role of policy for the next decade, lifelong learning was still seen as a commodity within an employment strategy. This is understandable when coming from the employment and social affairs standpoint, however the addition of the role of social partners, social protection and anti-discrimination makes for an ambitious strategy and opened the door *to operate as pioneers of change ... how well we manage our economies and societies ... towards the creation of a society for all ages* (pp.9 & 10).

The 'silver economy' has been further explored in the *Towards a Multiage Society: The cultural dimension of age policies* conference sponsored by the European Economic and Social Committee, European Older People's Platform, UNIC (European National Institutes of Culture) and UNESCO's Management of Social Transformations (MOST) program. The structural change of society, the crisis in the life phases welfare distribution system and the contribution of active seniors to society were main subjects (http://portal.unesco.org/shs/en/ev.php-URL_ID=11093&URL_DO=DO_TOPIC&URL_SECTION=201.html).

With a function to promote adult learning, the UK National Institute of Adult Continuing Education (NIACE) has collated ground-breaking research regarding these demographic challenges and pointed the way to an educational response in policy initiatives. Three seminal works, viz. *Learning to Grow Older and Bolder: A policy paper on learning in later life* (1999) *Older People Learning: Myths and realities* (2004) and *Demography and Older Learners: Approaches to a new policy challenge* (2005) have been authored by various scholars under the NIACE aegis and warrant detailed reference by any agency seeking to encompass all policy options.

This paper considers the current situation in respect of initiatives that might progress these objectives and augers well for a more comprehensive, integrated and joined-up approach.

The Evolving Local Government Role

A key feature of the policy landscape since the 2001 (amended 2002) *National Strategy for an Ageing Australia* has been initiatives taken to strengthen the local government role in strategies for healthy and active ageing.

In response, it is noted that:

- At a national level, the Australian Local Government Association (ALGA) developed an *Australian Local Government Population Ageing Action Plan 2004-2008*, along with supporting information and materials, to build the capacity of local government to plan for an ageing population. This initiative has been taken in partnership with the Australian Government.
- State local government associations have developed some complementary initiatives with State Government support.

The ALGA ...*Population Ageing Action Plan* (2004) has been built around four principal thrusts:

1. building awareness of population ageing within local government;
2. encouraging local government action;
3. fostering partnerships to support a more collaborative approach to positive ageing;
4. improving information access.

A number of initiatives have been undertaken in support of these objectives. These have included the conduct of an "Ageing Awareness and Action Survey" and the development of a "Local Government Ageing Toolbox" to support councils in this work, with downloadable tools and online resources for developing an ageing strategy.

Action taken in Victoria by the Municipal Association of Victoria (MAV) has enabled the *Positive Ageing in Local Communities Project* in partnership with the Council on the Ageing (COTA) Victoria. This initiative has funded seven demonstration projects to develop and test a number of approaches to strengthening positive ageing. Typical projects include:

- Yarra Ranges – to develop a whole of Council positive ageing strategy;
- Bass Coast – to develop an ageing policy and strategy;
- Casey – to address the issue of social isolation.

The Yarra Ranges initiative is of particular interest in illustrating the potential to link lifelong learning with a whole-of-council positive ageing strategy. Yarra Ranges Shire is a declared learning community with a range of lifelong learning initiatives across the shire. These are directed at objectives such as fostering intergenerational activities, encouraging learning across the shire in a range of ways (for example, fostering the U3A movement, promoting the library role in lifelong learning, to promoting the value of mature workers in the workplace). In this work, the views of senior citizens are focussed through the role of the Positive Ageing Forum Executive (PAFE).

Overall, initiatives taken through the national and state local government associations is building up a body of experience on ways to encourage and support active ageing in a broad spectrum of local government contexts. The key role of local government in local strategies will continue to evolve, with active ageing initiatives likely to serve as a catalyst in broadening and strengthening the social, cultural, educational, environmental and economic roles of councils in local communities and for community capacity building.

The research base being developed by National Seniors as part of its *Productive Ageing: Passion – Growth – Experience* can further enhance the body of knowledge in developing effective lifelong learning responses. In addition, bodies, such as the Australian Pensioners Insurance Agency (APIA) is sharing the concerns, interests, ideals and attitudes of this older cohort with *Understanding Over 50s*. It is also worthwhile to source the guides of relevance from the Global Learning Services website (www.gls.netspeed.com.au).

Internationally, the European Commission Learning in Local and Regional Authorities (LILARA) Project provides a wealth of resources in audits and charters to help local governments create intergenerational learning communities (www.lilaraproject.com). This has grown from the *Towards Europe and a Learning Society* (TELS) project managed by Longworth (www.longlearn.org.uk) and in response to the identification of "Lifelong Learning" as the guiding principle for European education in the 21st Century, with consequential imperatives embodied in: *Memorandum on Lifelong Learning and Realising a European Area of Lifelong Learning*:

(<http://ed.europa.eu/education/policies/lll/life/memoen.pdf>,
http://ed.europa.eu/education/policies/lll/life/index_en.html).

Continuous development is advised in creating environments conducive to lifelong learning so that any jurisdiction will *recognise and understand the key role of learning in the development of basic prosperity, social stability and personal fulfilment, and mobilise all their human, physical and financial resources creatively and sensitively to develop the full human potential of all citizens*. This applies to all ages. Some steps can be based on the European Commission R3L (Regional Networks for Life-Long Learning) program in adapting to change, achieving sustainable communities and creating opportunities for all.

In connecting with the diversity of older Londoners for example, the critical role of partnerships, networks and festivals across boroughs was acknowledged with the London Councils *Engaging Older Citizens* (2007) initiative to *improve quality of life in later life ... inform public planning, policies and services that affect older citizens* (p.9). While the research noted interaction was still 'weighted' towards health and social care as well as traditional forms of consultation, integrating lifelong learning appears marginalised and not conceived as part of a 'joined up' approach. It is salutary to note Reghenzani's (2002) case study advice, in that partnerships need to attend comprehensively to all impacts and are *heavily relational, dynamic and need to recognise the investment of all partners* (p.14) in considering applications such as the London Councils initiative. However, some crucial themes for the future from these activities included understanding perspectives and reflecting in response to:

- *Older people have a diverse range of skills, interests, needs and priorities;*
- *The most innovative forms of engagement typically contain an element of informality;*
- *Local engagement partnerships can be improved by: corporate mainstreaming of engagement procedures; maintaining communication links; nurturing trust in relationships; varying engagement approaches and settings; ensuring adequate resources such as funds are available; and providing guidance for engagement.*

(London Councils, 2007, p. 39)

Selected Action by Australian States

Some State governments have acted to develop educational and community learning strategies to support active ageing. Victoria provides an example, while the new South Australian Community Learning policy has components in it that will contribute to active ageing.

The Office of Senior Victorians has acted to support active ageing in a number of ways.¹ These include the initiative being implemented by MAV and COTA previously outlined, as well as structured growth funding to the University of the Third Age (U3A) network to extend U3A membership throughout the State and promoting the 'Mens' Sheds' concept. This move through such 'vehicles' acknowledges the research base indicating that people who remain intellectually and physically active enjoy benefits to their mental and physical health, as well as how developing social and friendship networks build individual and community capital in ways important to reducing the risks of social isolation and loneliness that can accompany ageing.

Support in real terms, especially to under serviced areas of the State, is seen as community building and part of the *A Fairer Victoria* social policy action plan series (<http://www.vic.gov.au/VictoriaOnline?action=content&id=1760&pageName=Latest&pageTitle=Latest>) that recognises the value of lifelong learning for older people.

The South Australian *Community Learning* (2007) policy identifies learning in the community as providing many avenues for engaging in improvements to quality of life, as individuals and for sustainable societies. The goals, priorities and objectives of this policy seek to appreciate the value of, and create opportunities for participation in, community learning. While not singling out an ageing demographic specifically, assisting all the population to *continue learning throughout their lifetime in order to ensure their wellbeing and prosperity* is addressed as one of the State's *greatest social and economic challenges* (p.6).

In Queensland, the Office of Seniors is initiating several research projects aimed at community learning and action in conjunction with a seniors evidence group, the Queensland Seniors Council. It has focussed also on social participation and safety/security concerns, inclusive of *Time for Grandparents, Seniors Legal & Social Services*,

¹ Victoria uses the term positive ageing which is basically the same as the concept of active ageing which we have used.

Seniors Enquiry Line and funding the twenty *Older People Action Project Coordinators* programs. Encouraging independence and diversity are issues and identifying leading practice models is part of the *Cross Government Project to Reduce Social Isolation of Older People*. Embracing lifelong adult and community learning, in its fullest scope as proposed by this paper, still requires integration and inter-disciplinary action.

Policies to Enhance the Employability of Older Workers

A number of initiatives have been taken by Australian governments to enhance the employability of older workers. Generic employability skills are now included in all Training Packages under agreed Commonwealth/State arrangements. A program of training vouchers has recently been initiated to provide education and training for people without a Year 12 qualification from school, or equivalent qualification. Recognition of Prior Learning initiatives are gaining considerable traction.

In addition, steps are being taken to examine effective ways of providing education and training for mature age workers. For example, a current research study funded under the Australian Flexible Learning Framework, involving one of the authors of this paper - Bowman & Kearns (forthcoming), is examining how e-learning can be used in providing education and training for mature age workers. Another author is involved in 'Redesigning Work for an Ageing Society' with international collaborators and major Australian companies, as well as in age management programs with key stakeholders (State and Local government, industry/ employer groups, the Unions).

However, various cultural barriers, including stereotypes about older workers and retirement, remain and impede the employability of older workers as a component in active ageing. It is likely that many of the barriers are most effectively addressed at the local community and organisational levels as key aspects of immediate strategies for active, positive and productive ageing.

Initiatives such as those cited above, involve ad hoc steps towards finding effective ways to maintain the employability of older workers. This process should be seen as a necessary component in action to foster the strategic role of adult and community education as an essential dimension of active ageing. This role should be reflected in future revisions of the *National Strategy for an Ageing Australia*.

The RSCA (Recruitment and Consulting Services Association Ltd) 2007 *Lifelong Learning: Think tank discussion paper*, motivated by the threat to national 'productivity and prosperity', was a way to come to terms with the challenge as *Australia reaps the harvest of an ageing population, under-investment in education, and technology that demands brains instead of brawn* (p.2).

Driven by concerns over a predicted shrinking workforce, as outlined in the Australian Government 2007 *Intergenerational Report* (those entering the workforce in 2002-2003 will equal those for 2020-2030); maintaining skills, achieving full potential, receiving professional development and being engaged positively are seen as essential requirements for a productive future.

Thus, lifelong learning is seen in the RSCA Paper as a necessary key to effective responses. While still viewed from a work life driven productivity perspective (i.e. securing the best from the nation's workforce and resources for economic growth), lifelong learning has much broader implications for a productive and civil society. It must be an approach that values and has at its core the commitment, right and access for all to continue to learn and grow, personally and professionally. Such a ramification is about creating positive, productive and optimum lives that impact all areas and at all levels through well-integrated policies for lifelong learning.

We are advocating that maximizing human capital through education needs to recur throughout the lifespan. Investing in such lifelong learning opportunities and programs is seen as the means to keeping the population engaged, current and alive with knowledge, skill and initiative. Policies have to complement each other. That is, opportunities to learn need not only to be available, but community and workplaces need to be serious about recruiting, retaining and developing the older person. If the highest proportion of discouraged job seekers (37%) were categorized in a 2006 RSCA study as considered too old by employers, then what cultural shifts and policies are required to ameliorate this plight?

As stated earlier, by the 2020s the working age population will grow by fewer in a decade (125,000) than current annual growth (170, 000), (Access Economics Ltd, 2001). Furthermore, five people of working age currently support every person aged 65 and over. This is projected to decline to just 2.4 by 2047 (ABS, 2006a, p.47). And, in

an earlier 'Mature Age Workforce' special advertising report, *The Weekend Australian* quoted the Diversity Council of Australia fact file, attaching importance to the values around seeking and holding jobs (p.5):

People's reasons for looking for work beyond employment

	Very Important	Important
Being able to keep mentally active	66%	33%
Need for personal satisfaction and a sense of contributing	54%	42%
Being employed in an organisation supportive of older workers	48%	42%
Having job with flexibility including hours of work	44%	49%
Need for financial income	42%	47%
Sense of identity and self-worth linking to being employed	41%	44%

In a chapter for a PASCAL (Place Management, Social Capital and Learning Regions) publication by NIACE, co-authors of this paper have reiterated what the 2006 *Skills for the Future* initiatives acknowledge as *the need for continuous upgrading of skills over the course of an individual's working life*. Thus, lifelong learning is critical to the scaffold, as embodied in the chapter title: 'Community Education, Learning Communities and National Skill Policy in Australia: Is there light at the end of the tunnel?' (Kearns & Reghenzani, forthcoming).

Towards a New Paradigm for VET (Vocational Education and Training) and ACE (Adult and Community Education)

While maintaining the employability of older workers is important, the implications of the new demography and associated changes raise basic issues on the roles and relationships of vocational education and training and adult and community education, and make a compelling case for the development of a new paradigm to articulate roles of these sectors in a more integrated way.

Vocational education and training has been developed over the past decade and a half as an industry-led, competency based training system. Strategies for lifelong learning have had little place in this approach, with its focus on meeting the skill needs of industry. The current proposition on subsuming ACE as a means to deliver cheaper low level conventional and accredited courses without an identity in its own right as a significant educational service maintains a narrow and outdated philosophy.

The implications of the new demography, and associated issues raised by sustainability questions, challenge this approach and will inevitably lead to a paradigm shift and a broadening of the VET role in a new and more relevant approach to adult learning in a global world of constant change.

The case for a paradigm shift in VET has been made largely on grounds of sustainable development, through the work of UNESCO, and its agency UNEVOC, ILO, and is also reflected in the work of OECD.

The UNESCO Second International Congress on Technical and Vocational Education (TVE), held at Seoul in 1999, articulated the case for a new development paradigm with a focus on sustainable development and which asserted:

Accordingly, the values, attitudes, policies and practices of TVE must have their foundation in this paradigm
(UNESCO, 1999)

The joint UNESCO/ILO Recommendation of 2001 on technical and vocational education then gave effect to principles emerging from the UNESCO International Congress, including links to lifelong learning and building a learning culture in communities:

Given the necessity for a new relationship between education, the world of work and the community as a whole, technical and further education should exist as part of a system of lifelong learning adapted to the needs of each particular country and to worldwide technological development.
(UNESCO/ILO, 2001, p.9)

In addition to this link to lifelong learning, the joint UNESCO/ILO Recommendation also recognises the need to build a learning culture in society as a framework to enable individuals to continue developing throughout life

(UNESCO/ILO, 2001, p.10). A 2004 UNESCO meeting of experts further elaborated the principles from the Seoul Congress in the Bonn declaration on *Learning for Work, Citizenship and Sustainability* (UNESCO, 2004, p.107).

This line of development has articulated the case that the broadened concept of VET supporting sustainable development required an expansion of the VET concept beyond its traditional role (of producing human and economic capital), to incorporate other forms of capital, including social capital, that contribute to building strong communities (UNESCO, 2004, p.99).

A discussion paper subsequently issued by UNEVOC in 2006 in orienting TVET to sustainable development was provocative in its assessment of the current orientation of many TVET systems:

Unfortunately, TVET in many countries remains locked in to the role of being a supplier of skilled labour to industry and is, thereby, unable to respond effectively to the needs of the emerging Information Age.
(UNEVOC, 2006, p.12)

The OECD has added its contribution to this debate on the roles of VET and ACE in 21st century society through its thematic review of adult learning policies and practices. This *Beyond Rhetoric: Adult Learning Policies and Practices* report noted that *there is a general trend towards a more holistic approach to adult learning in a lifelong learning perspective* (OECD, 2003, p.73).

This was seen by OECD as offering a more systemic view of adult learning that avoided artificial distinctions between VET and ACE:

These developments have stimulated a shift from the concept of adult education towards that of adult learning, in a more systemic adult-centred view.
(OECD, 2003, p.74)

A broad and more integrated approach to adult learning in work and social contexts as a process of learning and development throughout life in addition to contributing to active and healthy ageing will also contribute to major economic objectives. While these include meeting the skill and human capital needs of the economy, this approach will also respond to emerging issues in regional growth in the context of an ageing population and workforce.

A joint research program by the University of the Sunshine Coast and the University of Southern Queensland has shown:

- the influence of spatial patterns of older age population movement with a concern that these same areas is where economic growth is reasonably low;
- the influence of human capital and innovation as drivers for regional growth.
(Garlick et al., 2006, p.58; Garlick et al., forthcoming)

These findings led Garlick and his associates to argue for accelerating the enterprising human capital contribution of the senior age population in these regions by enhancing their engagement with targeted learning (Garlick et al., 2006, p.58). In the forthcoming publication, Garlick, et al determined in an 11 regions study that VET, and specifically the 'E' in VET is underdone. Their analysis led them to conclude that VET can contribute to regional development by developing enterprising skills through education, fostering an enterprising culture, and facilitating greater local engagement through forming regional coalitions of expertise.

A somewhat related finding on links between population ageing in regions and economic outcomes emerged from the study undertaken by the National Institute of Economic and Industry Research (NIEIR) on demographic and economic change in the Wide Bay Burnett region of Queensland (NIEIR, 2006).

In undertaking this study, NIEIR undertook an analysis of 62 comparable Australian regions in which they compared the share of population aged 55 and over and the unemployment rate. This showed:

- there is a strong positive relationship suggesting that for every 1 percentage point rise in the share of population aged 55 and over, the unemployment rate will increase by 0.9 percentage points;
- in general, the more aged a region, the greater the rate of ageing.

These findings were vividly demonstrated in the Wide Bay Burnett region with its high unemployment rate and an ageing population; supported also by similar findings on the Sunshine Coast of Queensland (Sappey et al., 2007).

This growing research base on ageing and regional economic development points to the urgency of finding new approaches to learning throughout life which mobilises an ageing population in regions of Australia for sustainable economic, cultural and social development. Finding such approaches is a necessary investment in Australia's future, what has been termed in the UK: 'invest to save'.

Responding to the new demography with an ageing population and workforce joins other sustainability issues articulated by the international agencies cited above, and the emerging Australian research on ageing and regional development, in making the case for a paradigm shift in the present policy for VET and ACE that recognises the need for learning through life as an essential pillar of positive, active, productive, optimal, fulfilling and healthy ageing; as well as meeting the skill needs of the economy in the context of an ageing workforce. How to progress beyond the current sectoral boundaries and policy frameworks to a more systemic and holistic view of adult learning as a foundation of active ageing and successful communities is a critical challenge for policy makers, and the wider community.

4. SOME GENERAL OBSERVATIONS: AUSTRALIAN PERSPECTIVES

This overview of some perspectives on active ageing in Australia in the context of the new demography points to a number of converging perspectives that range across traditional social, cultural and economic sectors which need to be addressed in a more holistic and co-ordinated way.

In this context, there is a compelling case for a comprehensive cross-sectoral approach to active ageing that brings together a broad spectrum of social and economic objectives so as to build synergistic and all encompassing outcomes.

While the 2002 *National Strategy for an Ageing Australia* provides a useful starting point in this process of building a strategic partnership approach, the role of education and learning throughout life has not yet been brought into the *National Strategy* in a significant way.

This means that the *National Strategy* does not yet build on the wider benefits of learning in fields such as healthy living and supporting families and communities as an underpinning framework for a range of dimensions of active ageing.

This situation argues for lifelong learning perspectives as an integral component in the *National Strategy for an Ageing Australia* with the social, cultural, and economic benefits of a learning culture recognised.

While partnership and co-ordination of effort at all levels is important, our overview points to the particular significance of the local community level as the arena in which new attitudes to ageing need to be developed, and a range of obsolete stereotypes about ageing dispelled.

For this reason, we see particular value in the role of local government councils in the development of local strategies for healthy and active ageing. A good start has been made in the work of the Australian Local Government Association, and various State associations, in supporting action by individual councils. A number of good practice examples now exist, but these need to be harnessed and disseminated widely to foster building an evidence base for good practice in local initiatives in various contexts. A strong research effort to support this process is required.

Active ageing should not be seen as a series of events in the lives of older Australians, but rather as a process of living well through successive phases of the life course that leads to healthy and active ageing in a society for all ages. Maintaining the motivation and employability of older workers is but a part of this process, as is active civic engagement.

Although Australia is on this path, more needs to be done. Lifelong learning objectives have entered policy discussions of active ageing from time to time, and a few good practice examples exist, but the strategic role of

lifelong adult, continuing and community learning has yet to be embedded in the *National Strategy for an Ageing Australia*.

Community organisations, such as the Council on the Ageing, have recognised the relevance of learning throughout life as a necessary underpinning to healthy and active ageing, but the evolving policy frameworks have not as yet integrated learning throughout life in mainstream action. Policy responses to the challenge of an ageing population and workforce have evolved from an initial base in economic and financial concerns, and although social and knowledge aspects are now more significant, there is still some distance to go before truly holistic and cross-sectoral approaches emerge that recognise the wider benefits of learning in healthy, fulfilled and active ageing. The PASCAL (Place Management, Social Capital and Learning Regions) Observatory network could perhaps have a role in contributing to such development.

Active ageing in an inclusive society for all ages requires a wide range of partnerships involving many stakeholders. This is not a matter for governments alone so that a key issue resides in the question of how best to mobilise and co-ordinate the action of a wide range of stakeholders. While we have emphasised partnership and collaboration at a local community level, much would be gained from a national process of dialogue that culminated in a significant national event. Various models exist around the world for such a process.²

The new demography will transform basic aspects of life, work and society. This prescient conversion was recognised in the Executive Summary of the *White House Conference on Aging* report which quoted the Director of the Harvard Generations Policy Program:

What is clear is that the policy implications and ramifications are unprecedented in history. America's greying will transform politics, retirement systems, health care systems, welfare systems, labor markets, banking and stock markets. It will force a re-thinking of social mores and prejudices, from issues of age/gender discrimination in the job market to end-of-life care.

(White House Conference on Aging, 2005, p.6)

These comments apply equally to Australia, in addition to the case for lifelong learning being the pathway to purposeful and optimal living. These are forceful reasons to recognise the urgency of action to build a truly holistic approach to active ageing that recognises the key role of learning throughout life as an essential dimension to active, fulfilling, productive and healthy ageing.

The new demography challenges a spectrum of assumptions about life, work, and well being. While a useful start has been made in responding to this challenge, more needs to be done in ensuring that learning processes at all levels play a key role in building opportunities for healthy and active ageing for all Australians.

5. ACHIEVING THE WIDER BENEFITS OF LEARNING

There is growing research evidence that learning throughout life can bring a range of social, personal, and cultural benefits, as well as the economic benefits that usually attract most attention. This evidence includes the work of the Centre for Research on the Wider Benefits of Learning (www.learningbenefits.net) - London, while a useful overview of the impact of learning on health, family life, and building social capital is provided in a 2004 report from the Centre (Schuller et al., 2004).

The benefits of learning for healthy living, and enriching personal development, opportunity and engagement are key aspects of optimal policies to achieve healthy, fulfilled and active ageing. In the 2006 *Learning in Later Life* study by the National Institute of Adult Continuing Education (NIACE) – UK, partly funded by the European Social Fund, a correlation was reported between social exclusion, poor health, low income and poor education (NIACE, 2006, p.25). Rimmer (2007) in reviewing the lengthening lifespan of Australians and its impact for lifelong learning also states *mental stimulation adds to the quality of life* (p.317) and highlights the emphasis sought from the 'fourth' sector of education in the *benefits of learning for older people as a government responsibility* (p.319).

Access and engagement thus become major issues and reinforce the noted Age Concern and Mental Health Foundation recommendation for the provision of *opportunities for older people to continue in work or volunteer activities, and supporting them with relevant training and education* (NIACE, p.26) as part of a promoting health and well being in later life initiative. Equipping older people as informed consumers was also seen as increasingly

² Canada, for example, in 2002 held a National Summit on Innovation and Learning preceded by extensive community consultations across Canada.

important (eg public health prevention for behaviour change or balancing rights and responsibilities in complex matters such as Codes of Health Rights, will require informed consumers, raising issues of the breadth of 'capacity').

Reference is made to UK Department for Education and Employment (DfEE) research verifying the health and social benefits of learning in later life, as published by the Social Inclusion Unit, Office of the Deputy Prime Minister. It was the 2006 Sure Start in Later Life project of this Unit which established the links to participating in learning to a healthy and fulfilled later life:

The approach we are advocating brings together key partners of health, social services, benefits and housing, as well as often overlooked missing links such as transport, leisure, community safety and learning. This is about community capacity building to move the debate on from paternalism to prevention and promotion of well-being.

(NIACE, 2006, p.29)

The Canadian Council on Learning (www.ccl-cca.ca) has recognised this important connection with the inauguration of Knowledge Centres on Adult Learning, and Health and Learning as two of five knowledge centres. The Council is committed to *improving and being a catalyst for lifelong learning ... through all stages of life, from early childhood to the senior years.*

The work of the aforementioned London Research Centre suggests that the benefits of learning are dynamic and accumulative as learning typically leads to more learning in ways that transform and sustain lives (Schuller et al., 2004, p.161). Benefits are seen as dynamic in the sense that benefits gained in one domain, such as health, impact on functioning in other domains such as family, welfare, and community.

These findings make a powerful case for joined-up policies and strategies that enable the wider benefits of learning, as an essential underpinning of active ageing, to be achieved across a range of social, cultural, economic, educational and community sectors. Australia has some distance to go in achieving this situation and implementing real actions in accord. It still has some way to go in understanding and responding to the discovery that older people are more dependent on public education provision (as documented in the 2006 NIACE study), particularly in the choices they frequent and value that could be offered with a vibrant adult (personal, community, continuing, further, voluntary and lifelong) education sector.

The work of the London Research Centre also confirms the critical significance of the initial steps in supporting people in returning to learning, which the Centre has termed *identity capital*. The importance of building confidence, self esteem, independence and motivation to succeed in people returning to learning has also been confirmed in recent national consultations undertaken for an Australian study on the role of e-learning for mature age workers. Much good practice exists in this area which needs to be consolidated and made more widely available as guidelines to assist and support older learners.

Developing 'cognitive reserve', Melton (2005), strengthens and protects against mental and physical deterioration. Support to such endeavours surely fits the preventive value of governments' funding engagement in lifelong learning. The educational community is now benefiting from ongoing OECD/CERI (Centre for Educational Research and Innovation) educational neuroscience projects that are informing policy and practice.

The most recent publication *Understanding the Brain: The birth of a learning science* (OECD, 2007c) suggests that lifetime brain plasticity indicates people can be helped to learn at every stage of life. A significant finding on processing efficiency and counteracting reduced brain function was:

The more there are opportunities for older and elderly people to continue learning (whether through adult education, work or social activities), the higher the chances of deferring the onset or delaying the acceleration of neurodegenerative diseases (p.14).

In addition, the personalised and universal approach dispels ageist notions by identifying that:

Neuroscience buttresses support for education's wider benefits, especially for ageing populations ... (beyond the purely economic that counts so highly in policy-making) ... learning interventions as a valuable part of the strategy to address the enormous and costly problems of ageing dementia in our societies (p.18),

as discussed previously in 'Health and Well-Being', as a subset of 'Learning: Supporting Older Citizens in Key Settings'.

The OECD's first attempt to synthesise the vital social effects of education: *Understanding the Social Outcomes of Learning* (OECD, 2007b) complements the preceding research, reports from 13 OECD countries, and recognises that this is a contemporary issue, neither 'well understood', nor 'systematically measured'. In setting an agenda for strengthening the knowledge base and models in this arena, it is noted that *adult and informal learning play a big part in social outcomes, but often are unacknowledged* (p.14).

Developing a framework to understand fully the multiple contexts, relationships and lifetime impact of learning on health, civic and social engagement for policy and program development, several issues of substance were raised, viz:

- *The 'cumulative' and 'interactive' impacts of lifewide and lifelong learning.*
- *The potential impacts of 'informal' learning 'later interventions' in adulthood, or even different types of formal education.*
- *And the impacts of 'different curricula' (general, academic, vocational) and impacts of learning at different 'ages and stages' (p.10).*

These studies are illustrated in practice through the Goodenough (2007) *Unlocking the Community* report on *Upstream* as a part of a capacity-building, healthy living community process and engaged program; but can go beyond integrated health care into social enterprise and lifelong learning initiatives of adult, continuing and community education.

6. STRENGTHENING THE LEARNING CONTRIBUTION TO ACTIVE AGEING: KEY POLICY LEVERS

The analysis of this paper points to the following steps as ways in which the contribution of learning strategies to active ageing could be strengthened. It is also anticipated that significant developments in the neurosciences will further support our suggested actions:

1. Further the action of local government councils in building local strategies for active ageing, including wide dissemination of lessons/best practice emerging from strategies adopted by individual councils to date.
2. Encourage joined up policies at all levels that enable the wider benefits of learning and promote adult education: to be achieved across a range of sectors including education, health, welfare, supporting families and communities, and the overall quality of life, thus increasing integrated jurisdiction coherence, responses and relationships.
3. Strengthen the research effort on related flow-on, long-term benefits and inter-disciplinary knowledge base; to accompany such initiatives and to underpin, harness and mobilise the strategic role of adult and community learning for active ageing.
4. Propose the incorporation of guidelines on learning throughout life as an essential dimension in the *National Strategy for an Ageing Australia* together with the development of supporting materials for all stakeholders.
5. Initiate policies to break down inappropriate and obsolete barriers that segment work and life in such areas as:
 - a. recognising that employability skills and life skills have much in common so that much is to be gained by developing and valuing them in ways that support these connections;
 - b. orienting adult learning policies, including vocational education and training, to the growing significance of casual and part-time work for mature age people;
 - c. recognising economic, cultural and social outcomes from the informal and nonformal learning of adult, further, continuing and community education
 - d. valuing diverse life experiences.
6. Establish the recognition that learning policies and strategies for active ageing should be seen from the perspective of successive phases of life (lifecycle) with particular regard to key transition points in the life course.
7. Harness the potential of information and communication technology and multi-media in supporting learning throughout life and in contributing to active ageing.

8. Safeguard lifelong learning from its current peripheral status and integrate with incentive funding provision and *well designed co-financing arrangements* (OECD, 2005c, p.11) into participative community life (e.g. funding schemes, tax deductions, pooling resources, subsidies, individual allowances, philanthropy, etc.).
9. Model mentorship, guidance and peer support within an active ageing concept needing continuous reflection, quality delivery, accessibility, control and discourse.
10. Develop international connectivity through “observatory” and clearinghouse sharing of reforms, policy and operations.
11. Develop a society based on rights and responsibilities encouraging informed, knowledgeable and participative older citizens (NIACE, 2006, p.35)
12. Ensure recognition as a positive asset to a civil and learning society with positive, affirmative attitudes towards active and productive ageing.
13. Improve location, cost and timing of lifelong learning for older people.

7. IMPLICATIONS FOR OTHER COUNTRIES

The Australian experience in responding to the challenge of the new demography with its ageing population and workforce points to a number of general issues, from the perspective of adult and community learning, where international exchanges of ideas and experience would have considerable value. PASCAL could possibly serve as a vehicle to promote such exchanges linked to its interests in building stronger communities and regions.

- Should the challenge of the new demography be seen as providing an opportunity to re-focus and re-define the role of lifelong learning in communities? If so, in what ways?
- What are the features of a new paradigm for adult and community learning that will best support active ageing throughout society?
- What are the main barriers to be faced in progressing active ageing in PASCAL countries?
- Are the issues different, or more immediate, in rural and regional communities? What can be done?
- What role can information and communication technology and media play in progressing active ageing? What should be done?
- What are the key needs in maintaining the employability of older workers? What should be done?

This is a small selection of the many issues thrown up by the new demography that seem important to the authors of this paper from the perspective of adult and community learning. We hope that this paper, which we see as a very ‘hot topic’ will encourage a lively response, and we will be pleased to engage in further discussion.

Appendix 1 The New Demography

The world faces two major changes in its population:

- a major explosion in population. The world's population doubled (3 to 6 billion) in the 40 years to 1999; is now 6.6 billion; and projected to be 9 billion by 2042 (US Census Bureau <http://www.census.gov/ipc/www/world.html>). Almost all (98%) of this increase will be in the developing world (Kinsella & Velkoff, 2001).
- an historic change in the age structure of populations. Almost all countries are ageing. What is less well known is that developing countries, especially those of regional interest to Australia, face the most rapid changes (Kinsella & Velkoff, 2001). Accelerated by its family planning policies, China is ageing faster than any other nation in history; and in Japan, the number of people retiring from the workforce has exceeded the number of new recruits since 1999 (International Labour Organization, 2007).

These unprecedented changes are driven by increased longevity (people are living longer because of reduced mortality) and decreased fertility (women are having fewer children); moderated by factors such as migration.

Globally, while Europe has largely 'aged' already, UN projections indicate that many other countries, including Australia's neighbours and regional partners, will also experience rapid population ageing. The proportion of people 60 years and over will more than double in China, Hong Kong, India, Indonesia and Papua New Guinea by 2050 (ABS, 2006a). As a senior WHO official frequently states, "Europe got rich before it aged; China and other countries will age before they get rich" (Dr Alex Kalache, WHO). Australia then, has been described as 'occupying a transitional position between demographically young populations of Asia, Latin America and Africa and the old populations of Europe in general (and those of western and southern Europe in particular that are especially mature, such as Sweden, Italy and Greece). Australia's age structure is similar to that of Canada, New Zealand and the US. Within a few decades, however, by which time many of today's developing nations will be demographically old, Australia will be one of a large group of developed nations with very old populations' (Borowski & McDonald, 2007, p.19). These data present both challenges and opportunities for Australia.

Details of the growth and changes in Australia's population (with slight variance depending on assumptions about future levels of fertility, mortality, internal migration and net overseas migration are provided by the Australian Bureau of Statistics. The data are also provided for each State and Territory. Australia's population is projected to grow over the next 40 years, although at a slower rate, to be 28.5 million by 2047, 38% larger than at June 2006 (Australian Government, 2007, p. 4). Importantly for this discussion, it will also continue to age, illustrated by the increase in median age from 34 to 37 years in the decade from 1996 to 2006 (Australian Census 2006 www.abs.gov.au). Older Australians (aged 65 and over) are projected to increase from 2.6 million in 2004 to between 7 and 9 million in 2051 (ABS, 2006a, p. 44), with 65+ year olds nearly doubling to 25% and the 85 and overs tripling to 5.6% of the total population. Both the absolute numbers and the proportion of the total population who are 'older' are important for policy and service planning.

Both globally and in Australia population ageing is driven primarily by decline in fertility (women are having fewer children and having them later) and increased longevity/ reduced mortality (people are living longer), with a (probably) minor and changing contribution from external migration. Australia's fertility rate (currently 1.8), while below replacement level, is higher than in most developed countries (ABS, 2006a; Australian Government, 2007). Contributing factors include the postponement of first births (including the risk of childlessness), the expansion of social liberalism, and economic deregulation; moderated by policies such as gender equity (Borowski & McDonald, 2007).

Australia has the third highest longevity in the world (ABS, 2006a; Mathers, 2007, p. 40), after Japan and France. In the first half of the 20th century, Australia experienced a significant decrease in deaths from infectious diseases through improved living standards, affecting mainly younger age groups. More recently, declines in mortality have affected the other end of the life-span, primarily through a reduction in deaths from non-communicable diseases (eg chronic conditions such as cardio-vascular disease and cancer) (Borowski & McDonald, 2007, p. 24). On average, Australian men now live until 79 and women until 83 (Australian Census 2006 www.abs.gov.au), making it imperative that citizens and society maximise the benefit of these extra years, with minimal functional impairment.

For example, 'recent evidence points to the health benefits of continued learning in later life, and the positive effects for quality of life, lessening dependency and reducing care costs' (NIACE, 2003, p. 2).

The 'old old', aged 85 and over, will show the highest growth rate of all age groups (7% in 2006) (ABS, 2006a, p. 46); with important policy implications for health and support policies and services, including formal and informal care. Globally, there is tremendous interest in the rapid growth in centenarians. In Australia, in June 2004, 4,300 were aged 100 or more; projected to rise to 67,000 in 2051 (ABS, 2006a, p. 47).

Women predominate in older age, being 68% of all those aged 85+ in 2004; although the proportion is projected to decline due to the narrowing of the gap between male and female life expectancy (ABS, 2006a, p. 47). Women still retire with, on average, half the resources of men (AMP.NATSEM, 2007), but may have to stretch these resources further. Older women are more likely to live alone, with greater morbidity (ABS 1998 Survey of Disability, Ageing and Carers; Mathers, 2007, p. 53). Having cared for others, when their own time comes, they are less likely to have access to an informal carer, and are more likely to be in residential care than their male peers, so matters such as under-resourced retirement, user-pays and accommodation bonds may also show differential impacts based on gender.

Major interest is now being directed at the younger end of the population age scale. The proportion of the population under 15 years is projected to decrease from 20% (4 million, June 2004) to 13-16% (3.3-5.4 million) in 2051 (ABS, 2006a, p.41). This will have a significant influence on the availability of new labour market entrants, as well as on dependency rates, with the pace of ageing of the population expected to increase after 2010, as the baby boomers reach retirement age. By the 2020s the working age population will grow by fewer in a decade (125,000) than current annual growth (170, 000) (ACCESS Economics, 2001). Furthermore, five people of working age currently support every person aged 65 and over. This is projected to decline to just over two by 2047 (ABS, 2006a, p. 47). These data drive the policy imperatives of reducing early exit from the workforce, encouraging older workers to maintain and obtain skills, and employers to retain, retrain and recruit older workers (eg OECD, 2005a, 2005b). It also encourages all citizens to maximise health and well-being across the life-course.

There are other demographic complexities of relevance to this discussion. One characteristic is that 'ageing in Australia is very much a regional phenomenon' (Borowski & McDonald, 2007, p. 29), being especially dramatic in some country towns which young people have been leaving (Borowski & McDonald, 2007, p. 29), with marked workforce and social consequences (Conroy, Steinberg & Pini, 2005). Another factor is the ethnic heterogeneity of Australia, with the number of people aged 65 and over from culturally and linguistically diverse (CALD) backgrounds almost doubling between 2001 and 2016 (Rowland, 2007, p. 117), remaining around 22% of the total older population. While currently most are of European origin, some of whose populations have not been replenished through subsequent migration (eg Finnish people in Mt Isa) (Williams et al, 1999), the numbers from Asian countries will increase, particularly from Vietnam, China, Philippines, India, Malaysia and Sri Lanka (Rowland, 2007, p.118). Australian South Sea Islanders, Maori and Pacific Islander peoples, while reflecting outcomes closer to those of Indigenous Australians, are also classified as CALD.

Of great significance in any discussion on ageing in Australia are the differential experiences of older Aboriginal and Torres St Islander people, whose life expectancy remains 20 years short of other Australians. Exemplifying this, 'older Indigenous people refers to those aged 55 and over' (ABS, 2007, p.1), the median age of 21 years (cf 37 for the Australian population as a whole) reflecting both high fertility rates and deaths at younger ages (ABS, 2007, p. 2), often from preventable diseases/ injuries. For almost 15% of this older population, an Indigenous language is the main language spoken at home (ABS, 2007, p. 3).

Appendix 2

Definitions

The definitions are compatible with the definitions adopted in the OECD activity, the *Role of National Qualifications System in Promoting Lifelong Learning* project variously called “Moving Mountains”, “Building Bridges” and referenced as *Recognition of non-formal and informal learning*.

Formal learning refers to learning that takes place through a structured programme of instruction which is generally recognised by the attainment of a formal qualification or award (e.g. a Certificate, Diploma or Degree).

Non-formal learning refers to learning that takes place through a programme of instruction but does not usually lead to the attainment of a formal qualification or award (e.g. in-house professional development programmes conducted in the workplace).

Informal learning refers to learning that results from daily work-related, social, family, hobby or leisure activities (e.g. the acquisition of interpersonal skills developed through the experience of working as a sales representative).

Recognition of prior learning (RPL) is an assessment process that assesses the individual's nonformal and informal learning to determine the extent to which that individual has achieved the required learning outcomes, competency outcomes, or standards for entry to, and/or partial or total completion of, a qualification. In this sense, RPL does not refer to the awarding of advanced standing or credit in a course based on prior formal learning, and for the purposes of this document, it does not refer to informal ‘credit’ attributed by employers when evaluating current or prospective employees on the basis of experience or achievement for purposes of accessing employment or promotion.

(DEST, 2006, p. 2)

References

- Access Economics Ltd. (2001). *Population Ageing and the Economy*. Canberra: Commonwealth of Australia.
- Access Economics Ltd. (2003). *The Dementia Epidemic: Economic Impact and Positive Solutions for Australia* (Report for Alzheimer's Association Australia). Canberra: Access Economics.
- AMP.NATSEM. (2007). *Generation whY?* (AMP.NATSEM Income and Wealth Report Issue 17). Canberra: National Centre for Social and Economic Modelling (NATSEM).
- Aquino, J. A., Russell, D. W., Cutrona, C. E., & Altmaier, E. M. (1996). Employment status, social support, and life satisfaction among the elderly. *Journal of Counseling Psychology*, 43(4), 480-489.
- Australian Bureau of Statistics. (2007). *Older Aboriginal and Torres Strait Islander People: A snapshot 2004-05* (Cat No 4722.0.55.002). Canberra, ACT: ABS.
- Australian Bureau of Statistics. (2006a). *Population Projections Australia 2004 to 2101* (Cat No 3222.0). Canberra, ACT: ABS.
- Australian Bureau of Statistics. (2006b). *Voluntary work, Australia* (Catalogue No. 4441.0.). Canberra: ABS.
- Australian Government. (2002). *Intergenerational Report* (Budget Paper No. 5 2002-2003). Canberra: The Treasury.
- Australian Government. (2007). *Intergenerational Report*. Retrieved 27 August 2007, from <http://www.treasury.gov.au/igr/IGR2007.asp>
- Australian Institute of Health and Welfare. (2002). *Older Australia at a glance* (3rd ed.). Canberra, ACT: AIHW.
- Australian Local Government Association. (2004). *Australian Local Government Population Action Plan for 2004-2008*. Canberra: ALGA.
- Australian Pensioners Insurance Agency. (2007). *Understanding Over 50s*. Melbourne: APIA.
- Baker, L. A., Cahalin, L. P., Gerst, K., & Burr, J. A. (2005). Productive activities and subjective well-being among older adults: The influence of number of activities and time commitment. *Social Indicators Research*, 73(3), 431-458.
- Begg, S., Vos, T., Barker, B., Stevenson, C., Stanley, L., & Lopez, A. D. (2007). *The Burden of Disease and Injury in Australia 2003*. Canberra: AIHW.
- Berkman, L. F., Seeman, T. E., Albert, M., Blazer, D., Kahn, R., Mohs, R., et al. (1993). High, usual and impaired functioning in community-dwelling older men and women: findings from the MacArthur Foundation Research Network on Successful Aging. *J Clin Epidemiol*, 46(10), 1129-1140.
- Bishop, B. (1999). *The National Strategy for an Ageing Australia: Employment for mature age workers: issues paper*. Canberra: Commonwealth of Australia.
- Borowski, A., Encel, S., & Ozanne, E. (Eds.). (2007). *Longevity and Social Change in Australia*. Sydney: UNSW Press.
- Borowski, A., & McDonald, P. (2007). The Dimensions and Implications of Australian Population Ageing. In A. Borowski, S. Encel & E. Ozanne (Eds.), *Longevity and Social Change in Australia* (pp. 15-39). Sydney: UNSW Press.
- Bowman, K., & Kearns, P. (forthcoming). *E-learning for the Mature Age Worker*. Melbourne: Australian Flexible Learning Framework.

- Burke, D., Hickie, I., Breakspear, M., & Gotz, J. (2007). Possibilities for the prevention and treatment of cognitive impairment and dementia. *Br J Psychiatry*, 190, 371-372.
- Burr, J. A., Caro, F. G., & Moorhead, J. (2002). Productive aging and civic participation. *Journal of Aging Studies*, 16(1), 87-105.
- Conroy D, Steinberg M and Pini B (2005) Community capacity for emergency service provision. School of Management, Queensland University of Technology, Brisbane.
- Council on the Ageing (COTA). (2000). Response to Employment for Mature Age Workers: Issues paper for the National Strategy for an Ageing Australia. Retrieved 28 June 2007, from <http://www.cota.org.au?NSemploy.htm>
- de Vaus, D., Gray, M., & Stanton, D. (2003). *Measuring the value of unpaid household, caring and voluntary work of older Australians* (Research Paper No. 34). Melbourne: Australian Institute of Family Studies.
- Department for Victorian Communities. (2005). Positive Ageing in Local Communities. Retrieved 18 June 2007, from <http://www.seniors.vic.gov.au/web19/osv/dvcosv.nsf/headingpagesdisplay/positive+ageing?opendocument>
- Department of Education Science and Training (DEST). (2006). *Recognition of non-formal and informal learning: Australian country report*. Canberra: DEST.
- Dychtwald, K. (2006). *The New Retirement Mindscape*. New York: Ameriprise Financial.
- Dychtwald, M. K. (1997). Marketplace 2000: Riding the wave of population change. *Journal of Consumer Marketing*, 14(4), 2271-2275.
- Encel, S., & Ranzijn, R. (2007). Age and Employment. In A. Borowski, S. Encel & E. Ozanne (Eds.), *Longevity and Social Change in Australia* (pp. 142-166). Sydney: UNSW Press.
- Feachem, R. G. (1992). *The Health of Adults in the Developing World*. New York: Published for the World Bank by Oxford University Press.
- Fillit, H., Butler, R., O'Connell, A., Albert, M., Birren, J., Cotman, C., et al. (2002). Achieving and maintaining cognitive vitality with aging. *Mayo Clin Proc*, 77(7), 681-696.
- Fonda, S. J., & Herzog, A. R. (2001). Patterns and risk factors of change in somatic and mood symptoms among older adults. *Annals of Epidemiology*, 11, 361-368.
- Garlick, S., Taylor, M., & Plummer, P. (forthcoming). *An Enterprising Approach to Regional Growth: The role of VET in regional development*. Adelaide: NCVET.
- Garlick, S., Waterman, P., & Soar, J. (2006). Human Capital, Regional Growth and the Productive Ageing: The new perspectives for policy and practice. In *Ageing-in-place: Implications for local government*. Canberra: ALGA.
- Glass, T. A., de Leon, C. M., Marottoli, R. A., & Berkman, L. F. (1999). Population based study of social and productive activities as predictors of survival among elderly Americans. *BMJ*, 319(7208), 478-483.
- Glass, T. A., Seeman, T. E., Herzog, A. R., Kahn, R., & Berkman, L. F. (1995). Change in productive activity in late adulthood: MacArthur studies of successful aging. *J Gerontol B Psychol Sci Soc Sci*, 50(2), S65-76.
- Goodenough, S. (2007). Unlocking the Community. Retrieved 27 August 2007, from www.ilck.org.uk/record.jsp?type=publication&ID=17
- Government of South Australia. (2007). *Community Learning: Learn, live, grow, prosper*. Adelaide: Training and Skills Commission.

- Greenfield, E. A., & Marks, N. F. (2004). Formal volunteering as a protective factor for older adults' psychological well-being. *J Gerontol B Psychol Sci Soc Sci*, 59(5), S258-264.
- Ilmarinen, J. (2005). *Towards a Longer Worklife! Ageing and the quality of worklife in the European Union*. Helsinki: Finnish Institute of Occupational Health.
- International Labour Organization. (2005). *How to promote flexible retirement pathways while also extending working life?* (Report to: Ageing and Employment Policies OECD, Brussels). Geneva: ILO.
- International Labour Organization. (2007). *Visions for Asia's Decent Work Decade: Sustainable Growth and Jobs to 2015* (Report to: Asian Employment Forum: Growth, Employment and Decent Work, Beijing, China). Geneva: ILO.
- Kearns, P. (2005). *Achieving Australia as an Inclusive Learning Society: A report on future directions for lifelong learning in Australia*. Canberra: Adult Learning Australia.
- Kearns, P. & Reghenzani, D. M. (forthcoming). Community Education, Learning Communities and National Skill Policy in Australia: Is there light at the end of the tunnel? In C. Duke, M. Osborne & B. Wilson (Eds.), *Rebalancing the Social and the Economic: Learning, partnership and place*. Leicester: NIACE.
- Kendig, H. (2004). The social sciences and successful aging: Issues for Asia-Oceania. *Geriatrics and Gerontology International*, 4(s1), S6-S11.
- Kinsella, K., & Velkoff, V. A. (2001). *An Aging World: 2001*. Washington, DC: US Government Printing Office.
- Lafortune, G., Balestat, G., & Disability Study Expert Group Members. (2007). *Trends in Severe Disability Among Elderly People: Assessing the evidence in 12 OECD countries and the future implications* (OECD Health Working Papers). Paris: OECD.
- Larsson, A. (1999). *Active Ageing: The road to a society for all ages in an Ageing Europe*. Paper presented at the Active Ageing - Pivot of Policies for Older Persons in the New Millennium, 15-16 November 1999, Brussels.
- Livingstone, D. (2005). Exploring Adult Learning and Work in Advanced Capitalist Society. Retrieved 26 August 2007, from <http://www.obs-pascal.com/node/169>
- London Councils. (2007). *Engaging Older Citizens: A study of London boroughs*. London: Social Policy Publications
- Longworth, N. (2006). *Learning Cities, Learning Regions, Learning Communities*. London: Routledge.
- Lum, T. Y., & Lightfoot, E. (2005). The effects of volunteering on the physical and mental health of older people. *Research on Aging*, 27(1), 31-55.
- Lyons, M. (2001). *Third Sector: The contribution of nonprofit and cooperative enterprise in Australia*. St Leonards, N.S.W.: Allen & Unwin.
- Mathers, C. D. (2007). The Health of Older Australians. In A. Borowski, S. Encel & E. Ozanne (Eds.), *Longevity and Social Change in Australia* (pp 40-64.). Sydney: UNSW Press.
- Matthews, R. J., Jagger, C., & Hancock, R. M. (2006). Does socio-economic advantage lead to a longer, healthier old age? *Soc Sci Med*, 62(10), 2489-2499.
- Melton, L. (2005). Use It - Don't lose it. *New Scientist*, 188(2529), 32-35.
- Minister for Ageing. (2002). *National Strategy for an Ageing Australia: An older Australia, challenges and opportunities for all*. Canberra: Commonwealth of Australia.
- Murray, C. J. L., & Lopez, A. D. (1996). *The Global Burden of Disease: A comprehensive assessment of mortality and disability from diseases, injuries, and risk factors in 1990 and projected to 2020*. Cambridge, MA:

Published by the Harvard School of Public Health on behalf of the World Health Organization and the World Bank; Harvard University Press.

- Musick, M. A., & Wilson, J. (2003). Volunteering and depression: The role of psychological and social resources in different age groups. *Social Science & Medicine*, 56(2), 259-269.
- National Centre for Vocational Education Research. (2005). *The Mature-Aged and Skill Development Activities: A Systematic Review of Research*. Adelaide: NCVET.
- National Institute of Adult Continuing Education. (1999). *Learning to Grow Older & Bolder: A policy discussion paper on learning in later life*. (Briefing Sheet No. 45 October 2003). Leicester: NIACE.
- National Institute of Adult Continuing Education. (2003). *Older People and Learning: Some key statistics 2003*. Leicester: NIACE.
- National Institute of Adult Continuing Education. (2004). *Older People Learning: Myths and realities*. Leicester: NIACE.
- National Institute of Adult Continuing Education. (2005). *Demography and Older Learners: Approaches to a new policy challenge*. Leicester: NIACE.
- National Institute of Adult Continuing Education. (2006). *Learning in Later Life: A public spending challenge* (Briefing Sheet No. 45 October 2003). Leicester: NIACE.
- National Institute of Economic and Industry Research. (2006). *The Wide Bay Burnett Region: Demographic and economic change - A perspective and prospective analysis*. Melbourne: NIEIR.
- Oman, D., Thoresen, C. E., & McMahon, K. (1999). Volunteerism and mortality among the community dwelling elderly. *Journal of Health Psychology*, 4, 301-316.
- Organisation for Economic Co-operation and Development. (2003). *Beyond Rhetoric: Adult learning policies and practices*. Paris: OECD.
- Organisation for Economic Co-operation and Development. (2005a). *Ageing and Employment Policies: Australia*. Paris: OECD.
- Organisation for Economic Co-operation and Development. (2005b). *Ageing and Employment Policies: Synthesis Report*. Paris: OECD.
- Organisation for Economic Co-operation and Development. (2005c). *Promoting Adult Learning*. Paris: OECD.
- Organisation for Economic Co-operation and Development. (2007a). *Recognition of non-formal and informal learning: Guidelines for country participation*. Paris: OECD.
- Organisation for Economic Co-operation and Development. (2007b). *Understanding the Social Outcomes of Learning*. Paris: OECD.
- Organisation for Economic Co-operation and Development. (2007c). *Understanding the Brain: The birth of a learning science*. Paris: OECD.
- Peel, N. M., Bartlett, H. P., & McClure, R. J. (2004). Healthy ageing: How is it defined and measured? *Australasian Journal on Ageing*, 23(3), 115-119.
- Productivity Commission. (2005). *Economic Implications of an Ageing Australia* (Research Report). Canberra, ACT: Productivity Commission.
- Recruitment and Consulting Services Association Ltd. (2007). *Lifelong Learning: Think tank discussion paper*. Melbourne: RCSA.

- Reghenzani, D.M. (2002, October). *Creating Learning Partnerships and a Learning Corridor*. Paper presented at the OECD Learning Cities and Regional Conference, Melbourne.
- Rietschlin, J. (1998). Voluntary association membership and psychological distress. *Journal of Health and Social Behaviour*, 39, 348-355.
- Rimmer, S. (2007). Lifelong Education and Lifelong Learning. In A. Borowski, S. Encel & E. Ozanne (Eds.), *Longevity and Social Change in Australia* (pp. 316-333). Sydney: UNSW Press.
- Rowe, J. W., & Kahn, R. L. (1997). Successful aging. *The Gerontologist*, 37(4), 433-440.
- Sappey, R. B., Conroy, D., & Steinberg, M. (2007). *A 'Sunbelt' Labour Market in Australia: The Sunshine Coast, 1996-2001* (Working Paper No. 01/07). Bathurst: Charles Sturt University.
- Schuller, T., Preston, J., Hammond, C., Brassett-Grundy, A., & Bynner, J. (2004). *The Benefits of Learning: The impact of education on health, family life and social capital*. London: Routledge Falmer.
- Shmotkin, D., Blumstein, T., & Modan, B. (2003). Beyond keeping active: Concomitants of being a volunteer in old old age. *Psychology and Aging*, 18(3), 602-607.
- Steinberg, M. (2007). *Experience Pays: Liaison Officers' Perspectives*. Brisbane: Queensland Department of Employment and Industrial Relations.
- Steinberg, M., & Cain, L. (2004). Managing an ageing third sector workforce: International and local perspectives. *Third Sector Review*, 10(1), 7-26.
- Steinberg, M., Donald, K. J., Najman, J., & Skerman, H. (1996). Attitudes of employees and employers towards older workers in a climate of antidiscrimination. *Australian Journal on Ageing*, 15(4), 154-158.
- Studenski, S., Carlson, M. C., Fillit, H., Greenough, W. T., Kramer, A., & Rebok, G. W. (2006). From bedside to bench: Does mental and physical activity promote cognitive vitality in late life? *Sci Aging Knowledge Environ*, 2006(10), p. 21.
- The Weekend Australian. (2007, 2-3 June 2007). Mature Age Workforce: Special advertising report, pp. 1-6.
- Thoits, P. A., & Hewitt, L. N. (2001). Volunteer work and well-being. *Journal of Health and Social Behaviour*, 42(2), 115-131.
- UNESCO. (1999). *Final Report: Second International Conference on Technical and Vocational Education*. Paris: UNESCO.
- UNESCO. (2004). *Learning for Work, Citizenship, and Sustainability: Report of the UNESCO International Experts Meeting*. Bonn: UNEVOC.
- UNESCO/ILO. (2001). *Technical and Vocational Education and Training for the Twenty-first Century: UNESCO and ILO Recommendations*. Paris: UNESCO Geneva: ILO.
- UNEVOC. (2006). *Orienting Technical and Vocational Education and Training for Sustainable Development*. Bonn: UNEVOC.
- Valenzuela, M. J., & Sachdev, P. (2006). Brain reserve and dementia: a systematic review. *Psychol Med*, 36(4), 441-454.
- Van Willigen, M. (2000). Differential benefits of volunteering across the life course. *J Gerontol B Psychol Sci Soc Sci*, 55(5), S308-318.
- Walker, A. (1997). *Combating Age Barriers in Employment- European Research Report*. Luxemborg: Office of Official Publications of the European Communities.

- Warburton, J. (2006). Volunteering in later life: is it good for your health? *Voluntary Action*, 8(2), 3-15.
- White House Conference on Aging. (2005). *Report to the President and the Congress: The Booming Dynamics of Aging - From awareness to action*. Washington DC.
- Williams, G.M, Cartwright, C.M., Steinberg, M.A. and King, J.A. (1999). *A Double Jeopardy? NESB and ageing*. Report to Multicultural Affairs Queensland, Queensland Department of the Premier and Cabinet.
- World Bank. (2006). *Gender Equality as Smart Economics: A World Bank Gender Action Plan (Fiscal Years 2007-10)*. Washington, DC: World Bank.
- World Health Organisation. (2002). *Active Ageing: A Policy Framework*. Geneva: WHO.